Scientific and Technical Information Center

SEARCH REQUEST FORM 254870

Requester's Full Name: Cecilia Tajsic Examiner #: 82613 Date: 3-20-08
Art Unit: 1624 Phone Number: 2-4831 Serial Number: 10/589,875
Location (Bldg/Room#): REM 4B28 (Mailbox #): 5C18 Results Format Preferred (circle): PAPER DISK

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: See Bib Data Sheet

Inventors (please provide full names): _____

Earliest Priority Date: _____

Search Topic:
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known.

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

See claims attached. Please do structure search and
generate name(s) search. Display results to show
identification of source, and R.N.#, compound name &
structure of identified compounds. Search
Compounds of formula I, where Ring (A) is

See claim 1 and Ring I of Page
of Unity

Please call with any questions

STAFF USE ONLY

Type of Search

Searcher: _____
Searcher Phone #: _____
Searcher Location: _____
Date Searcher Picked Up: _____
Date Completed: _____
Searcher Prep & Review Time: _____
Online Time: _____

_____ DA Sequence (#)
_____ AA Sequence (#)
_____ Structure (#)
_____ Bibliography
_____ Litigation
_____ Fulltext
_____ Patent Family

Vendors and cost where applicable

_____ STN _____ Dialog
_____ QuestelOrbit _____ LexisNexis
_____ Sci-finder _____ WWW/Internet
_____ In-house sequence systems
_____ Commercial _____ Other (specify)
_____ Foreign _____ EPO _____ JPO

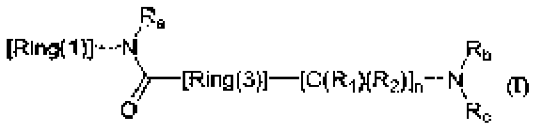
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. – 31. (Cancelled)

32. (New) A compound according to formula I:

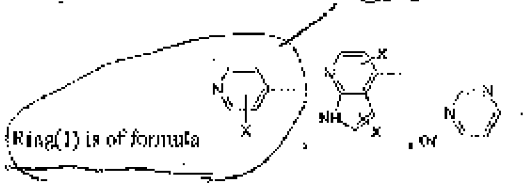


R_D is not defined in Claim 32

wherein

n is 1;

existing subject matter

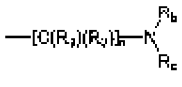
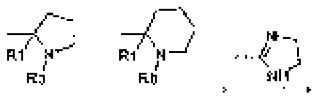
Ring(1) is of formula 

, or

wherein -X may be absent or denotes substitution with 1-4 substituents X that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl and a substituted or unsubstituted amino group;

Ring(3) is a 1,3-phenylene, 1,4-phenylene, 1,3-cyclohexylene, or 1,4-cyclohexylene optionally substituted with 1-4 substituents that are independently selected from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl, an amino group;

R_a is hydrogen; a linear or branched, optionally substituted C_1-C_6-alkyl; a linear or branched, optionally substituted C_1-C_6-alkoxy; or an optionally substituted aryl;


represents a group selected from 

and  ; and

R_1 is selected from the group consisting of hydrogen; a substituted or unsubstituted, saturated, unsaturated or aromatic 3-, 4-, 5-, 6-, 7-or 8-membered ring containing carbon atoms and optionally one or two heteroatoms; substituted or unsubstituted C_1-C_6 alkyl and cyano,

H/Cy/Ak/Ar

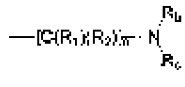
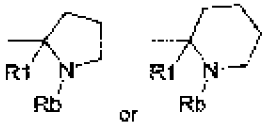
or a salt, pharmaceutically acceptable salt, pharmaceutically acceptable prodrug, tautomer, isomer, and/or stereochemical isomer thereof.

33 (New) The compound according to claim 32, wherein

Ring(1) is of formula  ;

Ring(3) is of formula  ,

wherein -Y may be absent or denotes substitution with 1-4 substituents Y that are independently chosen from halogen, C_1-C_6 alkyl, C_1-C_6 alkoxy, substituted or unsubstituted aryl, nitro, hydroxyl, and an amino group; and

 represents a group that is 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=> fil cap
FILE 'CAPLUS' ENTERED AT 10:12:11 ON 26 MAR 2008
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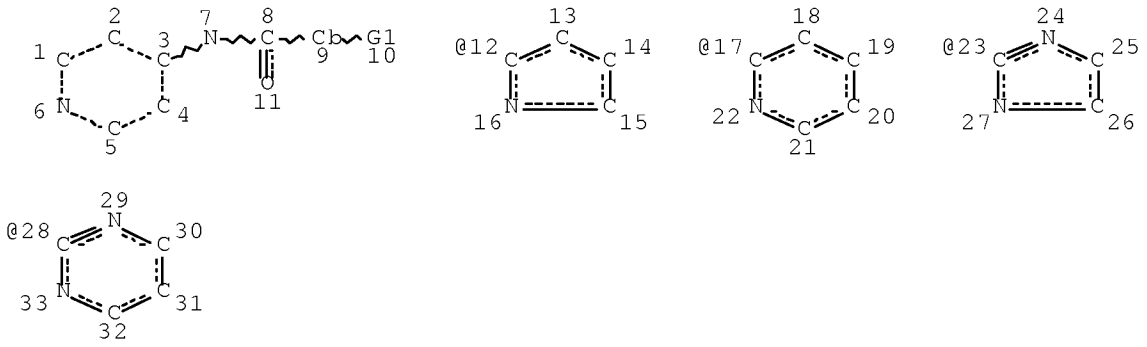
FILE COVERS 1907 - 26 Mar 2008 VOL 148 ISS 13
FILE LAST UPDATED: 25 Mar 2008 (20080325/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> d que l4
L1 STR



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CONNECT IS E2 RC AT 33
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DEFAULT ECLEVEL IS LIMITED
ECOUNT IS E6 C AT 9

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE
L3 32 SEA FILE=REGISTRY SSS FUL L1
L4 4 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> fil wpix
FILE 'WPIX' ENTERED AT 10:12:20 ON 26 MAR 2008
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FILE LAST UPDATED: 18 MAR 2008 <20080318/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200819 <200819/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> IPC Reform backfile reclassification has been loaded to the end of November 2007. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC, 20070601/UPIC, 20071001/UPIC and 20071130/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,
PLEASE VISIT:
http://www.stn-international.de/training_center/patents/stn_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE
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EXPLORE DERWENT WORLD PATENTS INDEX IN STN ANAVIST, VERSION 2.0:
http://www.stn-international.com/archive/presentations/DWPIAnaVist2_0710.pdf

>>> XML document distribution format now available - See HELP XMLDOC <<<

>>> ECLA Codes and Current US National Classifications have been added - see NEWS and HELP CHANGE <<<

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

>>> Updated PDF files in the following links:
http://www.stn-international.de/stndatabases/details/ico_0801.zip
http://www.stn-international.de/stndatabases/details/epc_0801.zip
Supplement of all changed ECLA items:
http://www.stn-international.de/stndatabases/details/ecla_0802s.zip <<<

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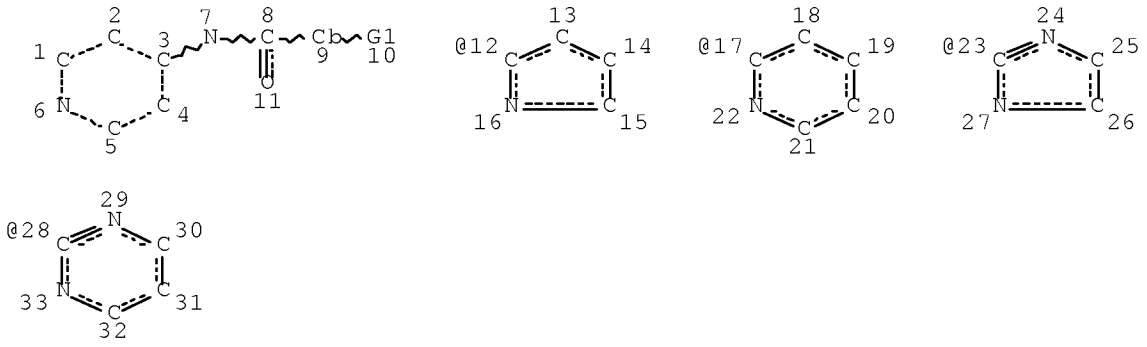

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GRAPH ATTRIBUTES:
RSPEC 3 12 17 23 28
NUMBER OF NODES IS 33

STEREO ATTRIBUTES: NONE
L7 9 SEA FILE=WPIX SSS FUL L5
L8 3 SEA FILE=WPIX ABB=ON PLU=ON L7/DCR

=> fil marpat
FILE 'MARPAT' ENTERED AT 10:12:27 ON 26 MAR 2008

FILE CONTENT: 1961-PRESENT VOL 148 ISS 11 (20080321/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

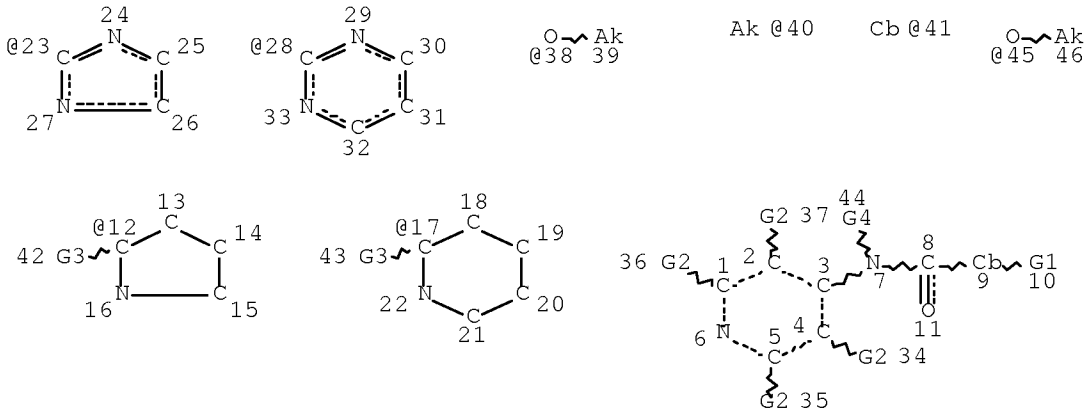
MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2008032917 07 FEB 2008
DE 102006035202 31 JAN 2008
EP 1882693 30 JAN 2008
JP 2008024674 07 FEB 2008
WO 2008021152 21 FEB 2008
GB 2439172 19 DEC 2007
FR 2904316 01 FEB 2008
RU 2316552 10 FEB 2008
CA 2593150 06 JAN 2008

Expanded G-group definition display now available.

Effective December 15th the iteration and answer limits in MARPAT have increased from 100,000 to 200,000 for both on-line and batch searches. For more information on MARPAT search limits, type HELP SLIMITS at an arrow prompt.

=> d que l14
L12 STR



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VAR G4=H/AK/45/47
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CONNECT IS E2  RC AT  32
CONNECT IS E2  RC AT  33
CONNECT IS E1  RC AT  39
CONNECT IS E1  RC AT  40
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GGCAT   IS UNS  AT  47
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS E6 C  AT   9

GRAPH ATTRIBUTES:
RSPEC  23  28  12  17   3
NUMBER OF NODES IS  47

STEREO ATTRIBUTES: NONE
L14          15 SEA FILE=MARPAT SSS FUL L12


=> fil beilst
FILE 'BEILSTEIN' ENTERED AT 10:12:34 ON 26 MAR 2008
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FILE LAST UPDATED ON January 3, 2008

FILE COVERS 1771 TO 2007.
*** FILE CONTAINS 10.119,480  SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in
   separate documents and can not be searched together in one query.
   Reaction data for BEILSTEIN compounds may be displayed
   immediately with the display codes PRE (preparations) and REA
   (reactions).  A substance answer set retrieved after the search
   for a chemical name, a compounds with available reaction
   information by combining with PRE/FA, REA/FA or more generally
   with RX/FA. The BEILSTEIN Registry Number (BRN) is the link
   between a BEILSTEIN compound and belonging reactions. For mo
   detailed reaction searches BRNs can be searched as reaction
   partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE  <<<

*********************************************************************
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.               *
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* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE  *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE         *
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*********************************************************************

>>> Price change as of January 1st, 2008: Connect Time and Structure
    Search fees re-introduced. See NEWS and HELP COST <<<

=> d que l16
L12             STR
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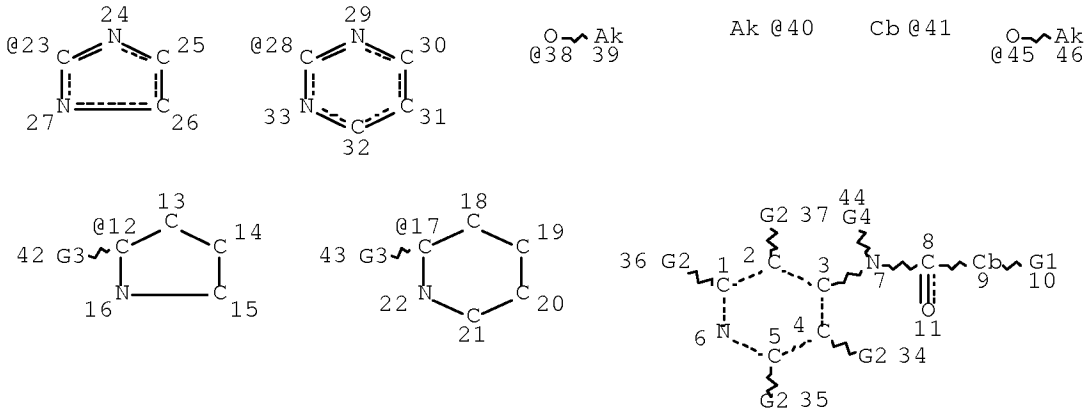

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VAR G2=H/X/40/38/41/NO2/OH/N
VAR G3=H/CY/AK/CN
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NODE ATTRIBUTES:
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CONNECT IS E1  RC AT  40
DEFAULT MLEVEL IS ATOM
GGCAT   IS UNS  AT  41
GGCAT   IS UNS  AT  47
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS E6 C  AT   9

GRAPH ATTRIBUTES:
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RSPEC  23  28  12  17   3
NUMBER OF NODES IS  47

STEREO ATTRIBUTES: NONE
L16           0 SEA FILE=BEILSTEIN SSS FUL L12


=> dup rem l4 l8 l14
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PROCESSING COMPLETED FOR L4
PROCESSING COMPLETED FOR L8
PROCESSING COMPLETED FOR L14
L24          19 DUP REM L4 L8 L14 (3 DUPLICATES REMOVED)
                ANSWERS '1-4' FROM FILE CAPLUS
                ANSWER '5' FROM FILE WPIX
                ANSWERS '6-19' FROM FILE MARPAT

=> d l24 ibib abs hitstr 1-5;d l24 ibib abs qhit 6-19

L24  ANSWER 1 OF 19  CAPLUS  COPYRIGHT 2008 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2005:984027  CAPLUS  Full-text
DOCUMENT NUMBER:          143:266951
TITLE:                    Preparation of N-(nitrogen-heterocyclyl)carboxamides
                          as protein kinase C inhibitors
INVENTOR(S):              Leysen, Dirk Casimir Maria; Defert, Olivier Raynald;
                          De Kerpel, Jan Octaaf Antoon; Fourmaintraux, Eric
                          Pierre Paul Rene; Arzel, Philippe; De Wilde, Gert
                          Jules Hector
PATENT ASSIGNEE(S):       Devgen N. V., Belg.
SOURCE:                   PCT Int. Appl., 102 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2005082367         A1    20050909    WO 2005-IB600           20050218
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
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MR, NE, SN, TD, TG

EP 1715862	A1	20061102	EP 2005-708700		20050218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS					
JP 2007523155	T	20070816	JP 2006-553706		20050218
US 2007191420	A1	20070816	US 2006-589875		20060818
PRIORITY APPLN. INFO.:			GB 2004-3635	A	20040218
			US 2004-545545P	P	20040218
			WO 2005-IB600	W	20050218

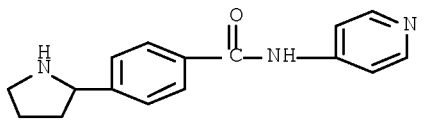
OTHER SOURCE(S): MARPAT 143:266951

AB The invention provides the use of carboxamides ([Ring(1)]- N(Ra)C(O)[Ring(3)]-(CR1R2)n-NRbRc (I); variables defined below; e.g. 4-(1-aminoethyl)-N-(pyridin-4-yl)benzamide dihydrochloride (II)) or a composition comprising said compound for inhibiting the activity of at least one kinase, other than ROCK kinase, in vitro or in vivo, pharmaceutical and/or veterinary compns. comprising such compds., medical and veterinary uses of such compds. and the compds. themselves. 44 Examples of I were tested for inhibition of epsilon, gamma, theta and zeta isoforms of protein kinase C. Although the methods of preparation are not claimed, .apprx.60 example prepns. are included. For example, II was prepared (92 and 61 %) in 2 steps starting with amide formation between 4-acetylbenzoic acid and 4-aminopyridine to give 4-acetyl-N-(pyridin-4-yl)benzamide, which was condensed with NH2OH·HCl to give the oxime that was reduced to the amine. For I: Ring(1) is a (un)substituted, saturated, unsatd. or aromatic 4-8-membered ring containing C atoms and at least one H-accepting heteroatom and optionally 1 or 2 further heteroatoms; Ra is a H or a linear or branched, (un)substituted C1-C6 alkyl, (un)substituted C1-C6 alkoxy or (un)substituted aryl; Ring(3) is a (un)substituted, saturated, unsatd. or aromatic 4-8-membered ring containing C atoms and optionally 1 or 2 heteroatoms; each R1 or R2 = H, a (un)substituted, saturated, unsatd. or aromatic 3-8-membered ring containing C atoms and optionally one or two heteroatoms, (un)substituted C1-C6 alkyl or cyano; n = 0-2. Rb and Rc are such that the amino group -NRbRc is essentially in a protonated form at a pH = 5.0-9.0; the distance between the at least one H-accepting heteroatom in Ring(1) and the N(Ra)(Rb) N atom, as determined using a scatter plot, is 11.0-11.8 Å; addnl. details are given in the claims.

IT 863769-39-5P, N-(Pyridin-4-yl)-4-(pyrrolidin-2-yl)benzamide dihydrochloride 863769-41-9P, 4-(Piperidin-2-yl)-N-(pyridin-4-yl)benzamide dihydrochloride 863769-46-4P, 4-(4,5-Dihydro-1H-imidazol-2-yl)-N-(pyridin-4-yl)benzamide 863769-47-5P, N-(Pyridin-4-yl)-4-(1,4,5,6-tetrahydro-1H-pyrimidin-2-yl)benzamide 863769-70-4P, 4-(Piperidin-2-yl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)benzamide dihydrobromide 863770-06-3P, N-(Pyridin-4-yl)-4-(pyrrolidin-2-yl)benzamide 863770-07-4P, 4-(Piperidin-2-yl)-N-(pyridin-4-yl)benzamide 863770-15-4P, 4-(Piperidin-2-yl)-N-(1H-pyrrolo[2,3-b]pyridin-4-yl)benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of N-(nitrogen-heterocyclyl)carboxamides as protein kinase C inhibitors)

RN 863769-39-5 CAPLUS

CN Benzamide, N-4-pyridinyl-4-(2-pyrrolidinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

RN 863769-41-9 CAPLUS
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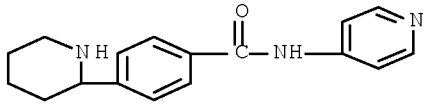
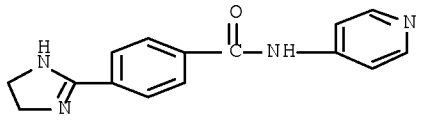


●2 HCl

RN 863769-46-4 CAPLUS
CN Benzamide, 4-(4,5-dihydro-1H-imidazol-2-yl)-N-4-pyridinyl- (CA INDEX NAME)



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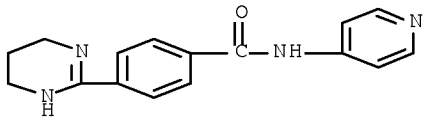

RN 863769-70-4 CAPLUS
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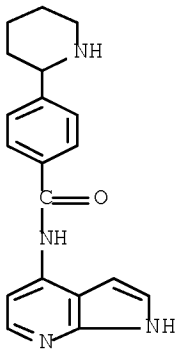
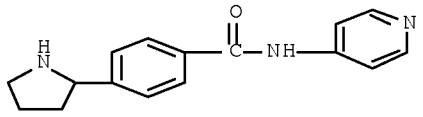
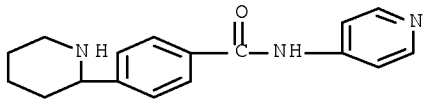


●2 HBr

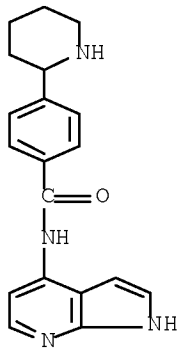
RN 863770-06-3 CAPLUS
CN Benzamide, N-4-pyridinyl-4-(2-pyrrolidinyl)- (CA INDEX NAME)



RN 863770-07-4 CAPLUS
CN Benzamide, 4-(2-piperidinyl)-N-4-pyridinyl- (CA INDEX NAME)

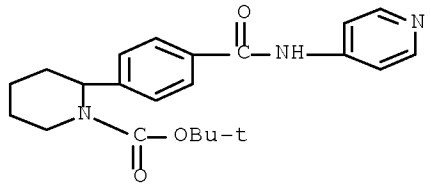


RN 863770-15-4 CAPLUS
CN Benzamide, 4-(2-piperidinyl)-N-1H-pyrrolo[2,3-b]pyridin-4-yl- (CA INDEX NAME)

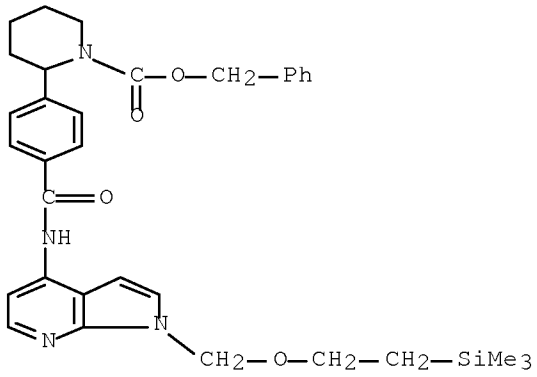


IT 863769-44-2P, 4-(N-BOC-piperidin-2-yl)-N-(pyridin-4-yl)benzamide
863769-74-8P, 2-[4-[[1-[[2-(Trimethylsilanyl)ethoxy]methyl]-1H-pyrrolo[2,3-b]pyridin-4-yl]carbamoyl]phenyl]piperidine-1-carboxylic acid benzyl ester 863769-75-9P, 2-[4-[(1H-Pyrrolo[2,3-b]pyridin-4-yl)carbamoyl]phenyl]piperidine-1-carboxylic acid benzyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-(nitrogen-heterocyclyl)carboxamides as protein kinase C inhibitors)

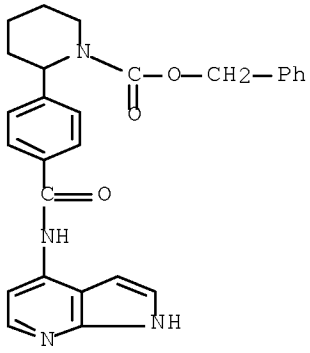
RN 863769-44-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 2-[4-[(4-pyridinylamino)carbonyl]phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 863769-74-8 CAPLUS
CN 1-Piperidinecarboxylic acid, 2-[4-[[[1-[[2-(trimethylsilyl)ethoxy]methyl]-1H-pyrrolo[2,3-b]pyridin-4-yl]amino]carbonyl]phenyl]-, phenylmethyl ester (CA INDEX NAME)



RN 863769-75-9 CAPLUS
CN 1-Piperidinecarboxylic acid, 2-[4-[(1H-pyrrolo[2,3-b]pyridin-4-ylamino)carbonyl]phenyl]-, phenylmethyl ester (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2005:314862 CAPLUS Full-text
DOCUMENT NUMBER: 142:392289
TITLE: Preparation of (hetero)aryl amides as ion channel ligands
INVENTOR(S): Kelly, Michael; Janagani, Satyanarayana; Wu, Guoxian; Kincaid, John
PATENT ASSIGNEE(S): Renovis, Inc., USA
SOURCE: Brit. UK Pat. Appl., 131 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2406856	A	20050413	GB 2004-22296	20041007

GB 2406856		B	20051019			
CA 2541299		A1	20050414	CA 2004-2541299		20041007
WO 2005032493		A2	20050414	WO 2004-US33403		20041007
WO 2005032493		A3	20050909			
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	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2005034870		A2	20050421	WO 2004-US33099		20041007
WO 2005034870		A3	20050623			
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005192293		A1	20050901	US 2004-962195		20041007
US 7338950		B2	20080304			
US 2005197364		A1	20050908	US 2004-961817		20041007
GB 2413129		A	20051019	GB 2005-9754		20041007
EP 1685109		A2	20060802	EP 2004-809916		20041007
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004015167		A	20061128	BR 2004-15167		20041007
JP 2007525482		T	20070906	JP 2006-534432		20041007
MX 2006PA03949		A	20060627	MX 2006-PA3949		20060407
PRIORITY APPLN. INFO.:				US 2003-508865P	P	20031007
				US 2004-575937P	P	20040601
				GB 2004-22296	A3	20041007
				WO 2004-US33403	W	20041007

OTHER SOURCE(S): CASREACT 142:392289; MARPAT 142:392289

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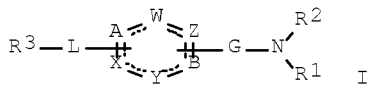


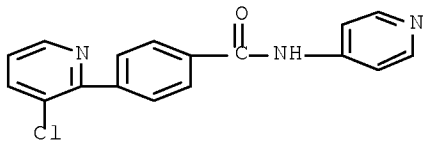
I

AB Title compds. I [A = N, CR4, a carbon atom bound to L, or is not an atom; one of W, Z, B, Y, X = carbon atom bound to L if A is not an atom, another of W, Z, B, Y, X = carbon atom bound to G, and each of the remaining W, Z, B, Y and X is independently N or CR4; L = bond, (CH2)n; n = 1-3; G = CO, CS, SO2; R1 =

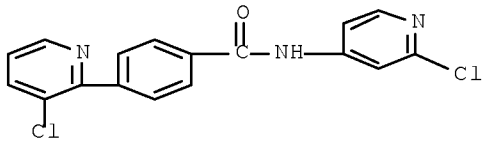
alkyl, heteroalkyl, aryl, etc.; R2 = H, alkyl; R3 = alkyl, heteroalkyl, aryl, etc.; R4 = H, alkyl, etc.] are prepared For instance, 4-(3-chloropyridin-2-yl)-N-(4-(trifluoromethyl)phenyl)benzamide (II) is prepared from 4-(3-chloropyridin-2-yl)benzoic acid (preparation given) and 4-trifluoromethylaniline (CH2Cl2, CO2Cl2, DMF). II did not significantly inhibit CYP2C9, CYP2D6 and CYP3A4 but exhibits inhibition for CYP2C19 (IC50 = 26.85 μM) and CYP1A2 (IC50 = 97.45 μM). I are useful in the treatment of pain, inflammation and traumatic injury.

IT 849753-68-0P 849753-89-5P 849754-17-2P
849754-60-5P 849755-02-8P 849755-16-4P
849755-80-2P 849755-93-7P 849757-30-8P
849757-53-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (hetero)aryl amides as ion channel ligands)

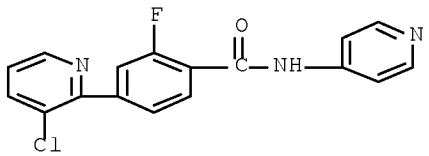
RN 849753-68-0 CAPLUS
CN Benzamide, 4-(3-chloro-2-pyridinyl)-N-4-pyridinyl- (CA INDEX NAME)



RN 849753-89-5 CAPLUS
CN Benzamide, N-(2-chloro-4-pyridinyl)-4-(3-chloro-2-pyridinyl)- (CA INDEX NAME)

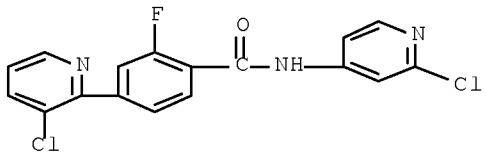


RN 849754-17-2 CAPLUS
CN Benzamide, 4-(3-chloro-2-pyridinyl)-2-fluoro-N-4-pyridinyl- (CA INDEX NAME)

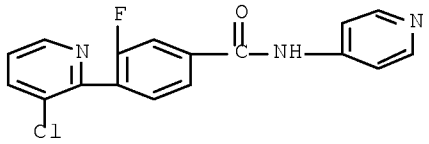


RN 849754-60-5 CAPLUS
CN Benzamide, N-(2-chloro-4-pyridinyl)-4-(3-chloro-2-pyridinyl)-2-fluoro-

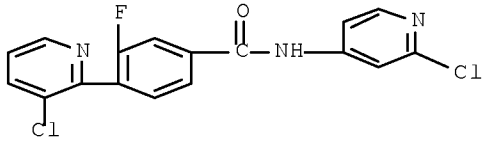
(CA INDEX NAME)



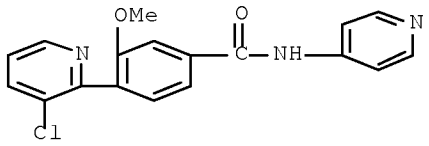
RN 849755-02-8 CAPLUS
CN Benzamide, 4-(3-chloro-2-pyridinyl)-3-fluoro-N-4-pyridinyl- (CA INDEX NAME)



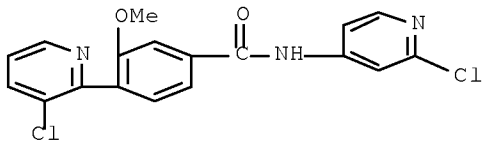
RN 849755-16-4 CAPLUS
CN Benzamide, N-(2-chloro-4-pyridinyl)-4-(3-chloro-2-pyridinyl)-3-fluoro- (CA INDEX NAME)



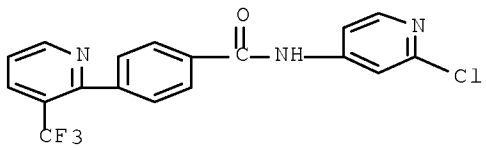
RN 849755-80-2 CAPLUS
CN Benzamide, 4-(3-chloro-2-pyridinyl)-3-methoxy-N-4-pyridinyl- (CA INDEX NAME)



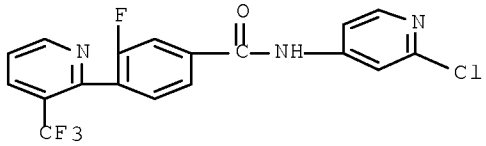
RN 849755-93-7 CAPLUS
CN Benzamide, N-(2-chloro-4-pyridinyl)-4-(3-chloro-2-pyridinyl)-3-methoxy- (CA INDEX NAME)



RN 849757-30-8 CAPLUS
CN Benzamide, N-(2-chloro-4-pyridinyl)-4-[3-(trifluoromethyl)-2-pyridinyl]- (CA INDEX NAME)



RN 849757-53-5 CAPLUS
CN Benzamide, N-(2-chloro-4-pyridinyl)-3-fluoro-4-[3-(trifluoromethyl)-2-pyridinyl]- (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:391508 CAPLUS Full-text
DOCUMENT NUMBER: 145:75997
TITLE: Synthesis, anti-inflammatory, analgesic and kinase (CDK-1, CDK-5 and GSK-3) inhibition activity evaluation of benzimidazole/benzoxazole derivatives and some Schiff's bases
AUTHOR(S): Sondhi, Sham M.; Singh, Nirupma; Kumar, Ashok; Lozach, Olivier; Meijer, Laurent
CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology Roorkee (IIT R), Roorkee, 247 667, UA, India
SOURCE: Bioorganic & Medicinal Chemistry (2006), 14(11), 3758-3765
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

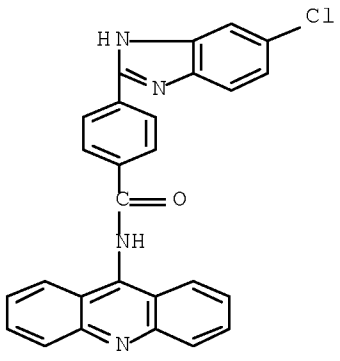
OTHER SOURCE(S): CASREACT 145:75997
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

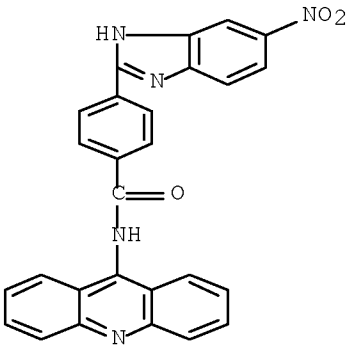
AB A series of N-(acridin-9-yl)-4-(benzo[d]imidazol/oxazol-2-yl) benzamides has been synthesized by the condensation of 9-aminoacridine derivs. with benzimidazole or benzoxazole derivs. Condensation of 2-hydroxy naphthaldehyde with functionalized diamines leads to the formation of Schiff's bases and not imidazole derivs. All these compds. were characterized by correct FT-IR, 1H NMR, MS and elemental analyses. These compds. were screened for anti-inflammatory, analgesic and kinase (CDK-1, CDK-5 and GSK-3) inhibition activities. Compds. (I) and a mixture (II, III) showed good anti-inflammatory (35.8% at 50 mg/kg po) activity and good analgesic activity (60% at 50 mg/kg po), resp. Compound (IV) showed significant in vitro activity against CDK-5 (IC50 = 4.6 μM) and CDK-1(IC50 = 7.4 μM) and compound (V) showed moderate CDK-5 inhibitory activity (IC50 = 7.5 μM). The other compds. showed moderate anti-inflammatory and analgesic activities.

IT 892866-06-7P 892866-07-8P 892866-08-9P
892866-09-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis, anti-inflammatory, analgesic and kinase (CDK-1, CDK-5 and GSK-3) inhibition activity evaluation of benzimidazole/benzoxazole derivs. and some Schiff's bases)

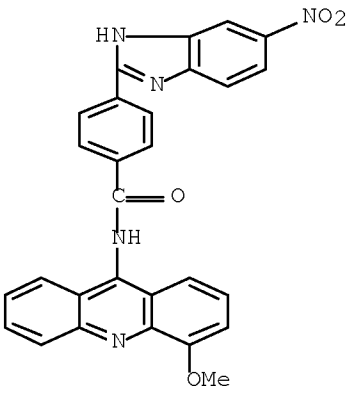
RN 892866-06-7 CAPLUS
CN Benzamide, N-9-acridinyl-4-(5-chloro-1H-benzimidazol-2-yl)- (CA INDEX NAME)



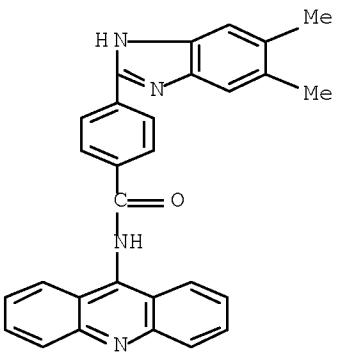
RN 892866-07-8 CAPLUS
CN Benzamide, N-9-acridinyl-4-(5-nitro-1H-benzimidazol-2-yl)- (CA INDEX NAME)



RN 892866-08-9 CAPLUS
CN Benzamide, N-(5-methoxy-9-acridinyl)-4-(5-nitro-1H-benzimidazol-2-yl)- (CA INDEX NAME)



RN 892866-09-0 CAPLUS
CN Benzamide, N-9-acridinyl-4-(5,6-dimethyl-1H-benzimidazol-2-yl)- (CA INDEX NAME)



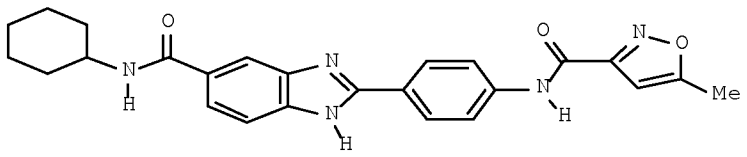
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:716082 CAPLUS Full-text
DOCUMENT NUMBER: 137:232653
TITLE: Preparation of 2-(carboxamidophenyl)benzimidazole-5-carboxamides and analogs as IgE and cell proliferation inhibitors
INVENTOR(S): Sircar, Jagadish C.; Richards, Mark L.; Major, Michael W.
PATENT ASSIGNEE(S): Avanir Pharmaceuticals, USA
SOURCE: PCT Int. Appl., 213 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072090	A1	20020919	WO 2002-US6801	20020228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002132808	A1	20020919	US 2002-90044	20020227
US 6759425	B2	20040706		
CA 2441177	A1	20020919	CA 2002-2441177	20020228
AU 2002247273	A1	20020924	AU 2002-247273	20020228
EP 1368028	A1	20031210	EP 2002-715052	20020228
EP 1368028	B1	20070815		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
HU 2003003460	A2	20040301	HU 2003-3460	20020228
HU 2003003460	A3	20040728		
CN 1496257	A	20040512	CN 2002-806486	20020228
JP 2004528304	T	20040916	JP 2002-571049	20020228
BR 2002008010	A	20041221	BR 2002-8010	20020228
NZ 528835	A	20050527	NZ 2002-528835	20020228
AT 369853	T	20070915	AT 2002-715052	20020228
ES 2291455	T3	20080301	ES 2002-715052	20020228
AU 2003201363	A1	20030612	AU 2003-201363	20030319
IN 2003KN01125	A	20051014	IN 2003-KN1125	20030905
MX 2003JL00027	A	20040430	MX 2003-JL27	20030910
ZA 2003007916	A	20040903	ZA 2003-7916	20031010
US 2004214821	A1	20041028	US 2004-795006	20040305
US 7282518	B2	20071016		

PRIORITY APPLN. INFO.:	US 2001-275260P	P	20010312
	US 2002-90044	A	20020227
	US 1998-86494P	P	19980522
	AU 1999-43120	A3	19990521
	WO 2002-US6801	W	20020228

OTHER SOURCE(S): MARPAT 137:232653
GI

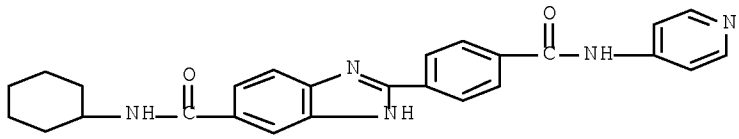


II

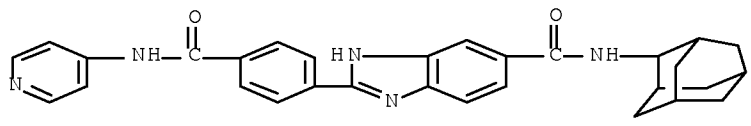
AB RZZ1R5 [I; R = CONR1R2 and R5 = NR3R4 or CONR3R4 or R = NR1COR2 and R5 = CONR3R4; R1,R2 = H, alkyl, (un)substituted (hetero)aryl, etc.; R3,R4 = H, alkyl, (hetero)aryl, alkanoyl, aroyl, etc.; Z = (un)substituted benzimidazole-n,2-diyl; Z1 = (un)substituted phenylene; n = 4-7] were prepared Thus, 3,4-(H2N)2C6H3CO2H was cyclocondensed with 4-(O2N)C6H4CHO and the product amidated by cyclohexylamine to give, after reduction and amidation, title compound II. Data for biol. activity of 1 I were given.

IT 459807-86-4P 459807-91-1P 459807-95-5P
459807-99-9P 459808-03-8P 459808-07-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-(carboxamidophenyl)benzimidazole-5-carboxamides and analogs as IgE and cell proliferation inhibitors)

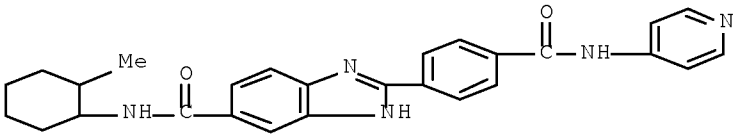
RN 459807-86-4 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-cyclohexyl-2-[4-[(4-pyridinylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



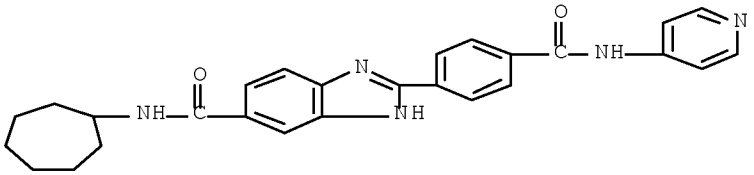
RN 459807-91-1 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 2-[4-[(4-pyridinylamino)carbonyl]phenyl]-N-tricyclo[3.3.1.13,7]dec-2-yl- (9CI) (CA INDEX NAME)



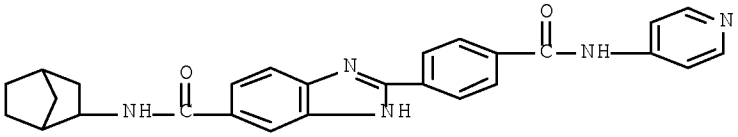
RN 459807-95-5 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-(2-methylcyclohexyl)-2-[4-[(4-pyridinylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



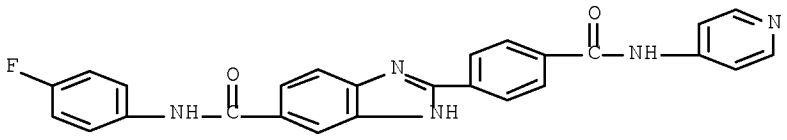
RN 459807-99-9 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-cycloheptyl-2-[4-[(4-pyridinylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 459808-03-8 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-bicyclo[2.2.1]hept-2-yl-2-[4-[(4-pyridinylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



RN 459808-07-2 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-(4-fluorophenyl)-2-[4-[(4-pyridinylamino)carbonyl]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 5 OF 19 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN
ACCESSION NUMBER: 2005-716592 [74] WPIX
CROSS REFERENCE: 2005-308639

DOC. NO. CPI: C2005-218279 [74]
TITLE: New aromatic amide compounds are vanilloid receptor agonists useful for the treatment of e.g. headache, Parkinson's disease, Alzheimer's disease, multiple sclerosis and stroke
DERWENT CLASS: B02; B03
INVENTOR: JANAGANI S; KELLY M; KINCAID J; WU G
PATENT ASSIGNEE: (RENO-N) RENOVIS INC
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
GB 2413129	A	20051019	(200574)*	EN	132[6]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
GB 2413129 A Div Ex		GB 2004-22296	20041007
GB 2413129 A		GB 2005-9754	20050516

PRIORITY APPLN. INFO: US 2004-575937P 20040601
US 2003-508865P 20031007
AN 2005-716592 [74] WPIX
CR 2005-308639
AB GB 2413129 A UPAB: 20060125
NOVELTY - Aromatic amide compounds (I) (capable of modifying ion channels in vivo) and their salts, solvates, prodrugs or stereoisomers are new.

DETAILED DESCRIPTION - Aromatic amide compounds of formula (I) (capable of modifying ion channels in vivo) and their salts, solvates, prodrugs or stereoisomers are new.

A = N, CR4, C bound to L or is not atom (one of W, Z, B,Y, X is C atom bound to L if A is not an atom, another of W, Z, B, Y, X is a C bound to G and each of the remaining W, Z, B, Y and X is N or CR4);

L = bond or -(CH2)n;

n = 1-3;

G = CO, CS or SO2;

R1, R3 = aliphatic (optionally substituted), (hetero)alkyl, (hetero)aryl or (hetero)aralkyl;

R2 = H or optionally substituted alkyl; and

R4 = H, alkyl (optionally substituted), acyl, acylamino, alkylamino, alkylthio, alkoxy, alkoxycarbonyl, alkylarylamino, arylalkyloxy, amino, aryl, arylalkyl, sulfoxide, sulfone, sulfanyl, aminosulfonyl, arylsulfonyl, sulfuric acid, sulfuric acid ester, dihydroxyphosporyl, aminohydroxyphosphoryl, azido, carboxy, carbamoyl, carboxyl, CN, cycloheteroalkyl, dialkylamino, halo, heteroaryloxy, heteroaryl, heteroalkyl, OH, NO2 or thio.

An INDEPENDENT CLAIM is also included for the preparation of (I).

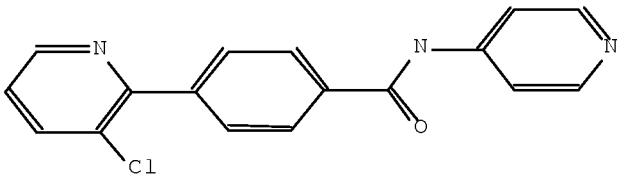
ACTIVITY - Analgesic; Immunosuppressive; Antiinflammatory; Neuroprotective; Antimigraine; Antiparkinsonian; Nootropic; Cerebroprotective; Vasotropic; Antidepressant; Antimanic; Neuroleptic; Tranquilizer; Eating-Disorders-Gen.; Hypnotic; Anticonvulsant; Gastrointestinal-Gen.; Uropathic; Respiratory-Gen.; Antiallergic; Antiasthmatic; Antiarthritic; Antirheumatic; Osteopathic; Cardiant; Ophthalmological; Antiarteriosclerotic; Antipruritic; Antipsoriatic; Endocrine-Gen.; Anorectic; Cytostatic; Vulnerary; Nephrotropic.

MECHANISM OF ACTION - Vanilloid receptor (VR-1) agonist. (I) were tested for VR-1 agonist activity using imaging assay. The result showed that the percentage inhibition value of (I) was 75%.

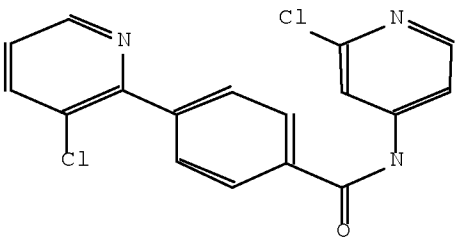
USE - (I) are useful for the treatment, prevention, amelioration or management of pain condition, autoimmune disease, inflammatory disease or condition, neurological or neurodegenerative disease, pain including acute, inflammatory and neuropathic pain, chronic pain, dental pain, headache including migraine, cluster headache and tension headache, Parkinson's disease, Alzheimer's disease, multiple sclerosis, diseases and disorders mediated by or result in neuroinflammation, traumatic brain injury, stroke, or encephalitis, centrally-mediated neuropsychiatric diseases and disorders including depression, mania, bipolar disease, anxiety, schizophrenia, eating disorders, sleep disorders and cognition disorders, epilepsy and seizure disorders, prostate, bladder and bowel dysfunction, urinary incontinence, urinary hesitancy, rectal hypersensitivity, fecal incontinence, benign prostatic hypertrophy and inflammatory bowel disease, respiratory and airway disease and disorders including allergic rhinitis, asthma and reactive airway disease and chronic obstructive pulmonary disease, diseases and disorders mediated by or result in inflammation including arthritis, rheumatoid arthritis and osteoarthritis, myocardial infarction, autoimmune diseases and disorders, uveitis and atherosclerosis, itch/pruritus, psoriasis, alopecia (hair loss), obesity, lipid disorders, cancer, high blood pressure, spinal cord injury or renal disorders. (I) are useful for the treatment of symptom such as symptoms of exposure to capsaicin, burns or irritation due to exposure to heat, light or burns (all claimed).

ADVANTAGE - (I) exhibited improved aqueous solubility and metabolic stability.

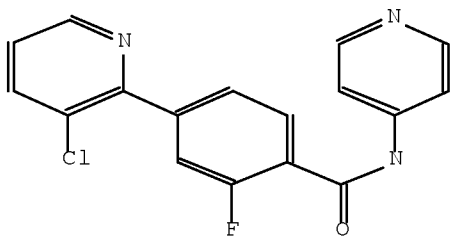
AN.S DCR-1063679
CN.S 4-(3-Chloro-pyridin-2-yl)-N-pyridin-4-yl-benzamide
SDCN RAHLOC



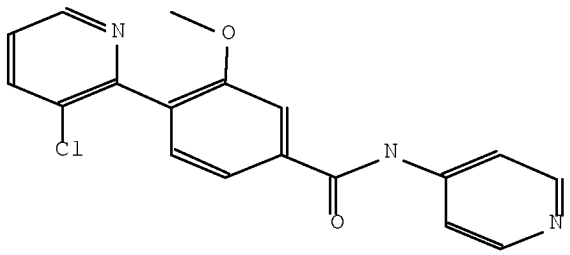
AN.S DCR-1063716
CN.S N-(2-Chloro-pyridin-4-yl)-4-(3-chloro-pyridin-2-yl)-benzamide
SDCN RAHLPD



AN.S DCR-1063751
CN.S 4-(3-Chloro-pyridin-2-yl)-2-fluoro-N-pyridin-4-yl-benzamide
SDCN RAHLQC



AN.S DCR-1170498
CN.S 4-(3-Chloro-pyridin-2-yl)-3-methoxy-N-pyridin-4-yl-benzamide
SDCN RAJTZC



L24 ANSWER 6 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 147:406803 MARPAT Full-text
TITLE: Preparation of benzenediamine derivatives as inhibitors of the interactions between MDM2 and p53
INVENTOR(S): Lacrampe, Jean Fernand Armand; Meyer, Christophe; Schoentjes, Bruno; Lardeau, Delphine Yvonne Raymonde; Poncelet, Alain Philippe; Van Hijfte, Luc
PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
SOURCE: PCT Int. Appl., 60pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

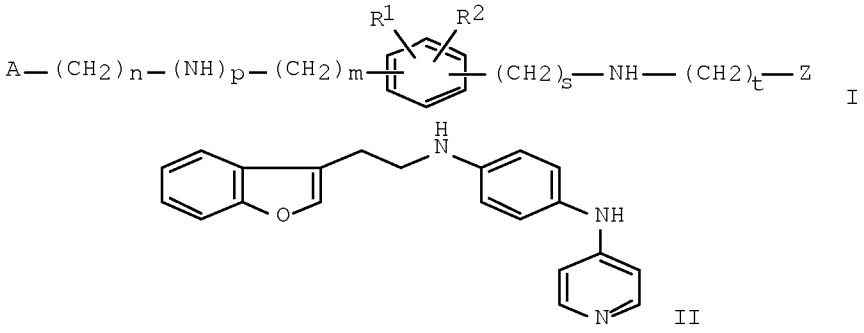
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007107543	A1	20070927	WO 2007-EP52579	20070319

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

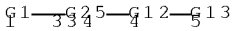
PRIORITY APPLN. INFO.: EP 2006-111531 20060322
US 2006-784780P 20060322

GI

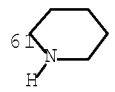


AB The title compds. I [wherein m = 0-2; n = 0-4; p, s, t independently = 0 or 1; R1, R2 independently = H, halo, alkyl, etc.; A = (un)substituted Ph, pyridinyl, pyrrolyl, thiophenyl or furanyl; Z = certain (un)substituted nitrogen heteroaryl] and N-oxides, salts, or stereoisomers thereof are prepared as inhibitors of the interactions between MDM2 and p53. For example, compound II was prepared in a multi-step synthesis. I showed inhibitory effect in both p53 ELISA assay and cell proliferation assay. The invented compds. are useful for the treatment of disorders mediated by p53-MDM2 interactions.

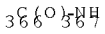
MSTR 1



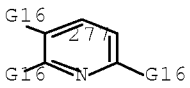
G1 = 61



G12 = 366-334 367-5



G13 = 277



G25 = phenylene (opt. substd. by (1-2) G7)
Patent location: claim 1
Note: or N-oxides, addition salts
Note: also incorporates claim 10, formula (VIII)
Stereochemistry: or stereochemically isomeric forms

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 147:95431 MARPAT Full-text
TITLE: Benzamides as TRPV1 modulators and their preparation and a pharmaceutical composition comprising an amide derivative
INVENTOR(S): Kai, Hiroyuki
PATENT ASSIGNEE(S): Shionogi & Co., Ltd., Japan
SOURCE: PCT Int. Appl., 90pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

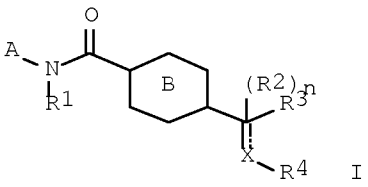
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007069773	A1	20070621	WO 2006-JP325313	20061213

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-361643 20051215

GI



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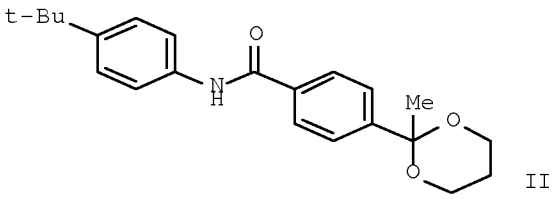
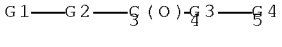


II

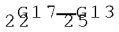
AB The invention provides a modulator of the TRPV1-receptor function, comprising a compound of the formula I. Compds. of formula I wherein A is (un)substituted (mono/bi)cyclic carbocycle, and (un)substituted (mono/bi)heterocycle; ring B is (un)substituted benzene, (un)substituted 6-membered heteroarom. ring containing N atom; R1 is H, (un)substituted lower alkyl and (un)substituted acyl; dashed line is a single or double bond; when dashed bond is a double bond, then n is 0; X is =CRx, and =N; R3 and R4 are taken together to form (un)substituted 5- to 6-membered nonarom. heterocycle; Rx is H, halo, lower (halo)alkyl, lower (halo)alkoxy and acyl; or X is =N; R3 is lower alkyl; R4 is lower alkoxy and aryloxy; when dashed bond is single bond, n is 1; R2 is H, (un)substituted lower alkyl; X is O, S, and NH and derivs.; R3 and R4 taken together for forum and (un)substituted nonarom. 5-to 6-membered heterocycle; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by amidation of 4-acetylbenzoic acid with 4-tert-butylaniline; the resulting N-(4-tert-butylphenyl) 4-acetylbenzamide underwent acetalization with 1,3-propanediol to give compound II. All the invention compds. were evaluated for their TRPV1 modulatory activity. From the assay, it was determined that compound II exhibited an IC50 value of 297 nM.

MSTR 1

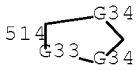


G1 = pyridyl (opt. substd.)
G2 = NH
G3 = phenylene (opt. substd. by 1 or more G32)

G4 = 22



G17 = 514-4 514-25



G33 = NH (opt. substd.)
G34 = CH2 (opt. substd.)
Patent location: claim 1
Note: or pharmaceutically acceptable salts or solvates

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

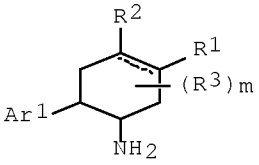
L24 ANSWER 8 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 146:273992 MARPAT Full-text
TITLE: Cyclohexenylamine derivatives and as inhibitors of dipeptidyl peptidase-iv (DPP-IV) and their preparation, pharmaceutical compositions and use in the treatment of various diseases
INVENTOR(S): Pei, Zhonghua; Geldern, Thomas Von; Madar, David J.; Li, Xiaofeng; Basha, Fatima; Yong, Hong; Longenecker, Kenton L.; Backes, Bradley J.; Judd, Andrew S.; Mulhern, Matthew M.; Stewart, Kent D.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 51pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2007049596	A1	20070301	US 2006-510451	20060825
WO 2007027651	A2	20070308	WO 2006-US33620	20060825
WO 2007027651	A3	20070531		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2005-712646P 20050830

GI



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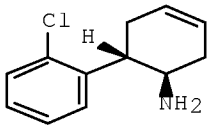
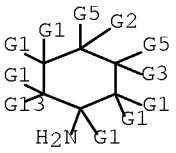


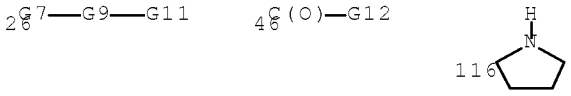
II

AB The invention relates to compds. of formula I, which inhibit dipeptidyl peptidase IV (DPP-IV) and are useful for the prevention or treatment of diabetes, especially type II, as well as hyperglycemia, metabolic syndrome, hyperinsulinemia, obesity, atherosclerosis, various immunomodulatory diseases, and other diseases. Compds. of formula I wherein R1 is H, (halo)alkyl, (hetero)aryl, heterocyclyl, cycloalkyl, cycloalkenyl, etc.; R2 is H, (halo)alkyl, cycloalkyl, heterocyclyl, (hetero)aryl, heterocyclealkyl, etc.; R3 is H and (halo)alkyl; dotted line is optional double bond; Ar1 is (un)substituted (hetero)aryl; and their pharmaceutically acceptable salts, metabolites, prodrugs, salt of prodrugs, and combinations thereof, are claimed. Example compound II was prepared by cyclization of 1,3-butadiene with 2-chloro-β-nitrostyrene; the resulting trans-1-chloro-2-(6-nitrocyclohex-3-en-1-yl)benzene underwent reduction to give compound II. All the invention compds. were evaluated for their DPP-IV inhibitory activity.

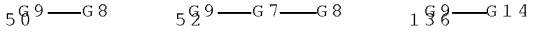
MSTR 1



G5 = 26 / 46 / 116



G9 = NH
G12 = 50 / 52 / 136



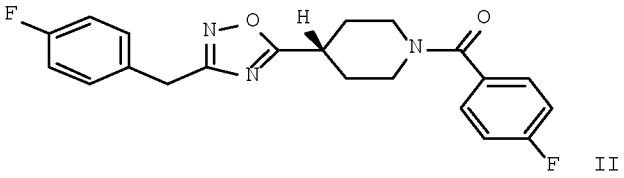
G14 = pyridyl (opt. substd.)
Patent location: claim 1
Note: substitution is restricted
Note: additional oxo and ring formation also claimed
Note: or pharmaceutically acceptable salts, metabolites, prodrugs, salts of prodrugs, or combinations

L24 ANSWER 9 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 146:45520 MARPAT Full-text
TITLE: Oxadiazole derivatives as positive allosteric modulators of metabotropic glutamate receptors and their preparation, pharmaceutical compositions and use in the treatment of diseases
INVENTOR(S): Farina, Marco; Gagliardi, Stefania; Le Poul, Emmanuel; Palombi, Giovanni; Rocher, Jean-Philippe
PATENT ASSIGNEE(S): Addex Pharmaceuticals SA, Switz.
SOURCE: PCT Int. Appl., 110pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006129199	A1	20061207	WO 2006-IB1882	20060517
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006253863	A1	20061207	AU 2006-253863	20060517
CA 2609513	A1	20061207	CA 2006-2609513	20060517
EP 1896464	A1	20080312	EP 2006-779844	20060517
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
KR 2008017040	A	20080225	KR 2007-729430	20071217
PRIORITY APPLN. INFO.:			GB 2005-10139	20050518
			WO 2006-IB1882	20060517

GI

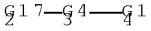
P—X—A—Y—W—B—Q I



II

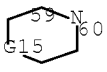
AB The invention relates to compds. which are heterocyclic derivs. of formula I. Compds. of formula I wherein W is (un)substituted C5-7 (hetero)cycloalkyl, and (un)substituted C5-7 heterocycloalkenyl; P and Y are independently (un)substituted (hetero)cycloalkyl and (un)substituted (hetero)aryl; A is N=N, Et, ethenyl, ethynyl, NHCO and derivs, NHSO2 and derivs., etc.; B is a single bond, CO-C0-2 alkyl, CO-C2-6 alkenyl, CO2, etc.; X and Y are independently a bond, NHCO2 and derivs., (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, c3-7 cycloalkyl, etc.; and their pharmaceutically acceptable salts, hydrates, solvates and N-oxides are claimed. Invention compds. are useful for treating central or peripheral nervous system disorders and other disorders which are affected by the neuromodulatory effect of mGluR5 pos. allosteric modulators such as cognitive decline and also to treat both pos. and neg. symptoms in schizophrenia. Example compound II was prepared by condensation of 4-fluorophenylacetonitrile with hydroxylamine followed by cyclization with (S)-1-Boc-piperidine-3-carboxylic acid; the resulting (S)-3-[3-(4-fluorobenzyl)-[1,2,4]oxadiazol-5-yl]piperidine-1-carboxylic acid tert-Bu ester underwent hydrolysis to give the corresponding piperidine hydrochloride, which underwent amidation with 4-fluorobenzoyl chloride to give compound II. All the invention compds. were evaluated for their pos. allosteric modulator activity of mGluR5. From the assay, it was determined that compound II exhibited an EC50 value of < 1 μM.

MSTP 1A

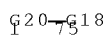


G1 = pyridyl (opt. substd.)
G4 = 9-2 10-4

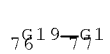
G6 = 59-2 60-10



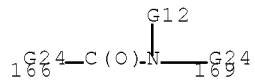
G15 = CH2
G17 = 1



G18 = 76



G19 = 166-1 169-77



G20 = phenylene (opt. substd.)
G24 = bond
Patent location: claim 1
Note: or pharmaceutically acceptable salts, hydrates, solvates or N-oxides
Note: substitution is restricted
Note: additional derivatization also claimed

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 10 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 144:488668 MARPAT Full-text
TITLE: Pyridine- and pyrimidinecarboxylic acid derivatives and related compounds as IL-12 modulators and their preparation, pharmaceutical compositions, and use for treatment of various autoimmune diseases
INVENTOR(S): Sun, Lijun; Kostik, Elena; Przewloka, Teresa; Ng, Howard P.; Chimmanamada, Dinesh; Demko, Zachary
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 246 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006053227	A2	20060518	WO 2005-US40952	20051110
WO 2006053227	A3	20060706		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,

GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM

AU 2005304393	A1	20060518	AU 2005-304393	20051110
CA 2586870	A1	20060518	CA 2005-2586870	20051110
US 2006223996	A1	20061005	US 2005-272509	20051110
EP 1819341	A2	20070822	EP 2005-820870	20051110

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
BA, HR, MK, YU

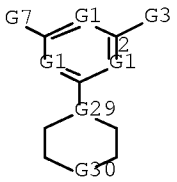
PRIORITY APPLN. INFO.:	US 2004-626761P	20041110
	WO 2005-US40952	20051110

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

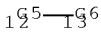
AB The invention relates to heterocyclic compds. of formula I, compns. including the compds. and methods of using and methods of making thereof. The compds. (and compns.) are useful, inter alia, in modulating IL-12 production and processes mediated by IL-12. Compds. of formula I wherein X and R1, taken together, are CONR'R''; X is (un)substituted (thio)carbonylamino, (un)substituted amino(thio)carbonyl, C(=NH)NH and derivs., NHC(NH) and derivs., (un)substituted amino(thio)carbonylamino, NHC(=NH)NH and derivs., etc.; R1 is R6-L-R7; R6 is (un)substituted (hetero)cycloalkyl, (un)substituted cyclyl, (un)substituted (hetero)aryl(alkyl), or absent; L is O, S, SO, SO2, NH and derivs., NHCO and derivs., CONH and derivs., COO or OCO or absent; R7 is H, (un)substituted alkyl, (un)substituted cyclyl, (un)substituted (hetero)cycloalkyl, (un)substituted (hetero)aryl(alkyl) etc; Q, U, and V are independently N or CRg, wherein at least one of Q, U or V is N; R3 is Rg, CHO and derivs., (thio)formyl, (oxy)acyl, sulfanyl(thio)acyl, amino(thio)acyl, C(=NH)H and derivs., etc.; Rg, R2 and R4 are independently H, (un)substituted alkyl(carbonyl), OH and derivs., SH and derivs., NH2 and derivs., hydroxyalkyl, (thio)formyl, (oxy)(thio)acyl, sulfanyl(thio)acyl, etc.; R' and R'' are independently H, (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, (un)substituted (hetero)cyclyl, (un)substituted (hetero)cycloalkyl, (un)substituted (hetero)aryl(alkyl), etc; G is hydrazide, hydrazone, hydrazine, hydroxylamine, oxime, amide, ester, carbonate, carbamate, etc; W is O, S, SO, SO2, NH and derivs., aminoacyl; m is 0-4; and their pharmaceutically acceptable salts, solvates, clathrates, hydrates, or polymorphs are claimed. Example compound II was prepared by substitution of Me 2,4-dichloropyrimidine-6-carboxylate with N-(2-hydroxyethyl)morpholine to give Me 2-chloro-6-[2-(morpholin-4-yl)ethoxy]pyrimidine-6-carboxylate, which reacted with morpholine to give Me 2-morpholino-6-[2-(morpholin-4-yl)ethoxy]pyrimidine-6-carboxylate, which underwent amidation with 5-amino-2,3-dimethylindole to give example compound II. All the invention compds. were evaluated for their IL-12 inhibitory activity. From the assay, noumerous of the invention compds. exhibited in vitro IC50 values < 1μM against human PBMC or THP-1 cells.

MSTR 1B

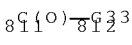


G1 = 7

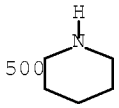
G3 = 12



G5 = 811-2 812-13



G6 = G25
G7 = G25 / 500



G25 = pyridyl
G33 = NH
Patent location: claim 1
Note: substitution is restricted
Note: additional substitution also claimed
Note: or pharmaceutically acceptable salts, solvates, clathrates, hydrates, or polymorphs

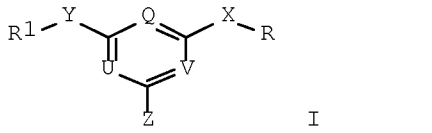
L24 ANSWER 11 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 144:488685 MARPAT Full-text
TITLE: Heteroaryl compounds, particularly N-heteroaryl hydrazones, their preparation, and their therapeutic use as IL-12 production inhibitors

INVENTOR(S): Sun, Lijun; Zhang, Shijie; Koya, Keizo; Chimmanamada, Dinesh; Li, Hao; James, David; Kostik, Elena
PATENT ASSIGNEE(S): Synta Pharmaceuticals Corp., USA
SOURCE: PCT Int. Appl., 172 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

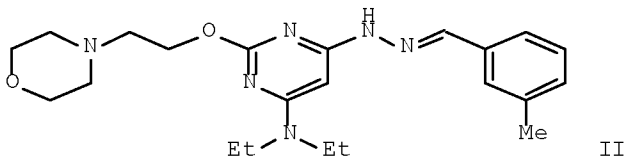
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006053109	A1	20060518	WO 2005-US40706	20051110
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 2006122156	A1	20060608	US 2005-271704	20051110

PRIORITY APPLN. INFO.: US 2004-627001P 20041110

GI



I

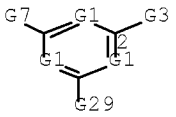


II

AB The invention is related to the preparation of heteroaryl compds. I [Q, U, V = independently N, CH and derivs.; Z = H, NH2 and derivs., OH and derivs., (un)substituted cyclo/alkyl, etc.; X = O, S, SO, CO, N:N, NHCO, etc.; R = R'-L'-R''; R' = (un)substituted cycloalkyl, cyclyl, aryl, etc.; L' = O, S, NH and derivs., absent, etc.; R'' = H, OH and derivs., halo, CN, alkyl, aryl, etc.; R1 = (CR2R4)n-G-R3; Y = CO, O, S, NH and derivs., absent, etc.; R3 = H, (un)substituted alk(en/yn)yl, heteroaryl, OSO2H, CHO, etc.; R2, R4 for each occurrence = independently (un)substituted alkyl, alkylcarbonyl, OH and derivs., NO, halo, CN, etc.; G = NH-C(NH)-NH, NH-CO-NH, NH-CS-NH, hetero/arylene, absent, etc.; n = 0-7], and pharmaceutically acceptable salts, solvates, clathrates, hydrates, prodrugs, and polymorphs thereof. The invention is also related to methods of modulating IL-12 production and

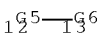
processes mediated by IL-12. E.g., a 4-step synthesis from 2,4,6-trichloropyrimidine and diethylamine was given for hydrazone II. I inhibited IL-12 production in human PBMC cells and THP-1 cell line in an in vitro assay. Thus, I are useful for treating or preventing disorders related with excessive bone loss, methods for inhibiting osteoclast formation, and methods for treating or preventing a disorder associated with excessive bone resorption.

MSTR 1B

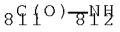


G1 = 7

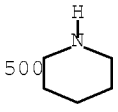
G3 = 12



G5 = 811-2 812-13



G6 = G25
G7 = G25 / 500



G25 = pyridyl
Patent location: claim 1
Note: substitution is restricted
Note: additional substitution also claimed
Note: or pharmaceutically acceptable salts, solvates, clathrates, hydrates, or polymorphs

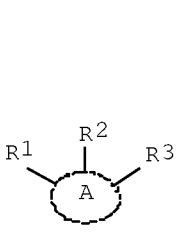
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 12 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 142:114071 MARPAT Full-text
TITLE: Preparation of substituted 5-membered ring compounds as heat shock protein 90 (HSP90) inhibitors
INVENTOR(S): Cheung, Kwai Ming; Dymock, Brian William; MacDonald, Edward; Drysdale, Martin James
PATENT ASSIGNEE(S): Vernalis Cambridge Limited, UK; Cancer Research Technology Ltd.; The Institute of Cancer Research
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005000300	A1	20050106	WO 2004-GB2755	20040624
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1638555	A1	20060329	EP 2004-743106	20040624
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
US 2006235058	A1	20061019	US 2005-561969	20051222
PRIORITY APPLN. INFO.:			GB 2003-15111	20030627
			WO 2004-GB2755	20040624

GI



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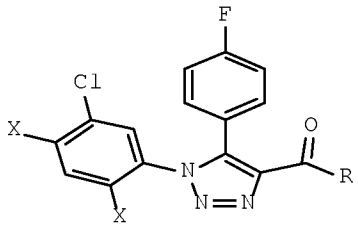
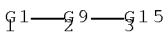


II

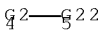
AB Title compds. I [wherein A = 5-membered cycle; R1 = (un)substituted (hetero)aryl; R2 (adjacent to R1) = absence, H, carboxamide, (un)substituted (hetero)aryl, carbocycle or heterocycle; R3 (adjacent to R2) = absence, H,

(un)substituted cycloalky(en)yl, alk(en/yn)yl, carboxyl, carboxamide or ester; with some limitations, or salts, N-oxides, hydrates or solvates thereof] were prepared as heat shock protein 90 (HSP90) inhibitors. Thus, 5-chloro-2,4-dimethoxyphenylamine was treated with NaNO2 in the presence of H2SO4 followed by the addition of NaN3. The resultant azide underwent cyclization with 3-(4-fluorophenyl)-3- oxopropionic acid Me ester gave intermediate II (X = OMe, R= OH). Demethylation of this compound with 48% HBr followed by esterification with EtOH yielded triazolecarboxylate II (X = OH, R = OEt), which showed IC50 <10 μM for binding to HSP90 in a fluorescence polarization assay. Therefore, I and their compns. are useful for immunosuppression or the treatment of cancers, viral disease, inflammatory diseases and so on.

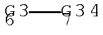
MSTR 1



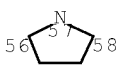
G1 = 4



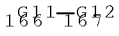
G2 = 6



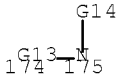
G3 = 56-2 57-5 58-7



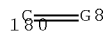
G8 = O
G9 = 166-1 167-3



G11 = phenylene (substd. by 1 or more G10)
G12 = 174-166 175-3



G13 = 180



G15 = pyridyl
Patent location: claim 1
Note: substitution is restricted
Note: or salts, N-oxides, hydrates or solvates

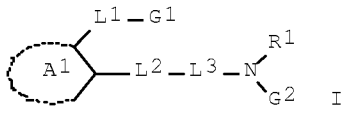
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 13 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 140:77140 MARPAT Full-text
TITLE: Preparation of thiazolyl aryl ureas as activators of glucokinase
INVENTOR(S): Polisetti, Dharma Rao; Kodra, Janos Tibor; Lau, Jesper; Bloch, Paw; Valcarce-Lopez, Maria Carmen; Blume, Niels; Guzel, Mustafa; Santhosh, Kalpathy Chidambareswaran; Mjalli, Adnan M. M.; Andrews, Robert Carl; Subramanian, Govindan; Ankersen, Michael; Vedso, Per; Murray, Anthony; Jeppesen, Lone
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.; Valcarce-Lopez,mariacarmen; et al.
SOURCE: PCT Int. Appl., 600 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004002481	A1	20040108	WO 2003-DK449	20030627
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2488642	A1	20040108	CA 2003-2488642	20030627
AU 2003243921	A1	20040119	AU 2003-243921	20030627
BR 2003012023	A	20050322	BR 2003-12023	20030627
EP 1531815	A1	20050525	EP 2003-761446	20030627
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1678311	A	20051005	CN 2003-820170	20030627
JP 2005537333	T	20051208	JP 2004-548878	20030627
CN 101130526	A	20080227	CN 2007-10153786	20030627
US 2004122235	A1	20040624	US 2003-679887	20031006
IN 2004CN02911	A	20060217	IN 2004-CN2911	20041221

MX 2005PA00130	A	20050217	MX 2005-PA130	20050103
NO 2005000426	A	20050329	NO 2005-426	20050126
ZA 2005000766	A	20060531	ZA 2005-766	20050126
US 2006183783	A1	20060817	US 2006-365534	20060301
PRIORITY APPLN. INFO.:			DK 2002-999	20020627
			US 2002-394144P	20020703
			DK 2003-286	20030225
			US 2003-452228P	20030305
			CN 2003-820170	20030627
			WO 2003-DK449	20030627

GI



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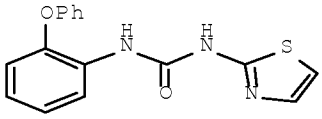
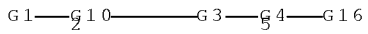


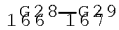
II

AB The title compds. [I; A1 = arylene, heteroarylene, fused cycloalkylarylene, etc.; L1 = a bond, O, S, SO, etc.; G1 = alkyl, cycloalkyl, cycloalkylalkylene, etc.; L2 = a bond, alkylene, alkenylene, etc.; L3 = CO, COCO, COCH2CO, SO2; R1 = alkyl, alkenyl, alkynyl, etc.; G2 = heteroaryl, fused heterocyclylheteroaryl, cycloalkylheteroaryl, etc.] which are activators of glucokinase and may be useful for the management, treatment, control, or adjunct treatment of diseases, where increasing glucokinase activity is beneficial (no data), were prepared and formulated. Thus, reacting 2-phenoxyaniline with 2-aminothiazole and 1,1'-carbonyldiimidazole afforded 95% the urea II.

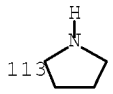
MSTR 1



G1 = G29 / 166



G3 = C(O)
G4 = NH
G10 = phenylene (opt. substd. by 1 or more G12)
G16 = pyridyl
G29 = 113



Patent location: claim 1
Note: or pharmaceutically acceptable salts, solvates, or prodrugs

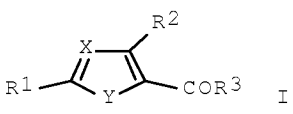
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 14 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 141:140463 MARPAT Full-text
TITLE: Preparation of heterocyclic compounds as selective phosphodiesterase V inhibitors
INVENTOR(S): Yamada, Koichiro; Matsuki, Kenji; Omori, Kenji; Kikkawa, Kohei
PATENT ASSIGNEE(S): Japan
SOURCE: U.S. Pat. Appl. Publ., 116 pp., Cont.-in-part of U.S. Ser. No. 258,545.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004142930	A1	20040722	US 2003-699804	20031104
US 7273868	B2	20070925		
JP 2002012587	A	20020115	JP 2000-277652	20000913
JP 3637961	B2	20050413		
WO 2001083460	A1	20011108	WO 2001-JP2034	20010315
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2003229089	A1	20031211	US 2002-258545	20021025
US 7220736	B2	20070522		
US 2008027037	A1	20080131	US 2007-889749	20070816

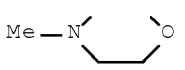
PRIORITY APPLN. INFO.:
JP 2000-130371 20000428
JP 2000-277652 20000913
WO 2001-JP2034 20010315
US 2002-258545 20021025
JP 1999-261852 19990916
US 2003-699804 20031104

GI

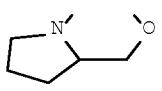


I

Q=

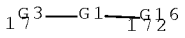


Q1=

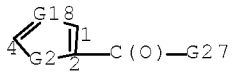


AB The title compds. (I) [X = CH, N; Y = NH, NR, S, O, CH:N, N:CH, N:N, CH:CHC(:R5)N, CH:C(R5), N:C(R7); R1 = each (un)substituted lower alkoxy, amino, heterocyclyl containing N atom(s), HO, or heterocyclyloxy containing N atom(s), cyano; R2 = lower alkylamino or lower alkoxy each optionally substituted by an (un)substituted aryl, lower alkoxy group substituted by an aromatic heterocyclic ring containing N atom(s), lower alkylamino group substituted by a (un)substituted heterocyclic ring, (un)substituted arylamino; R3 = each (un)substituted aryl, heterocyclyl containing N atom(s), lower alkyl, lower alkoxy, lower cycloalkoxy, heterocyclyloxy containing N atom(s), or NH2; R4-R7 = each (un)substituted aryl, heterocyclyl containing N atom(s), lower alkoxy, or NH2; R4, R5, R6 or R7 may combine with R3 to form a lactone ring Q or Q1; when X = N, Y = CH:N, or N:CH, R2 = an amino group monosubstituted by an (un)substituted arylmethyl, and R3 = (un)substituted lower alkyl, amino monosubstituted by an (un)substituted heterocyclyl-lower alkyl containing N atom(s) in the ring, heterocyclylamino containing N atom(s) in the ring, or (un)substituted lower cycloalkylamino, R1 = each (un)substituted lower alkoxy, amino, heterocyclyloxy containing N atom(s) in the ring, or cyano group] or pharmacol. acceptable salts thereof are prepared These compds. have excellent selective PDE V inhibitory activity and therefore, are useful as therapeutic or prophylactic drugs for treating various diseases due to functional disorders on cGMP-signaling, such as erectile dysfunction, pulmonary hypertension, and diabetic gastroparesis. Thus, 2-(hydroxymethyl)pyridine was treated with NaH in THF and etherified with 2-chloro-5-(3,4,5- trimethoxyphenylcarbonyl)-4-(3-chloro-4-methoxybenzylamino)pyrimidine to give 2-(2-pyridylmethoxy)-5-(3,4,5-trimethoxyphenylcarbonyl)-4-(3-chloro-4- methoxybenzylamino)pyrimidine.

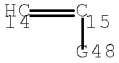
MSTR 1



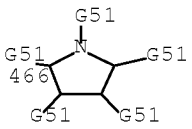
G1 = 4-17 1-172



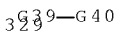
G2 = 14-4 15-2



G3 = 466



G18 = CH
G27 = 329



G39 = NH
G40 = pyridyl (opt. substd. by alkyl <containing 1-6 C>)
Patent location: claim 1
Note: additional ring formation also claimed
Note: substitution is restricted
Note: or pharmacologically acceptable salts

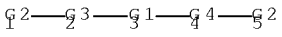
L24 ANSWER 15 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 137:369830 MARPAT Full-text
TITLE: Preparation of terphenyls and related polyaromatic compounds as proteomimetics for inhibiting the interaction of an α-helical protein with another protein or binding site
INVENTOR(S): Hamilton, Andrew D.; Ernst, Justin; Orner, Brendan
PATENT ASSIGNEE(S): Yale University, USA
SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002089738	A2	20021114	WO 2002-US14494	20020508
WO 2002089738	A3	20030410		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2446380	A1	20021114	CA 2002-2446380	20020508
AU 2002305450	A1	20021118	AU 2002-305450	20020508
US 2003008882	A1	20030109	US 2002-142126	20020508
US 6858600	B2	20050222		
EP 1408986	A2	20040421	EP 2002-734269	20020508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2005215563 A1 20050929 US 2005-43697 20050125
US 7312246 B2 20071225
PRIORITY APPLN. INFO.: US 2001-289640P 20010508
US 2002-142126 20020508
WO 2002-US14494 20020508

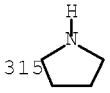
AB WBXBY [X = (substituted) Ph, pyridyl, piperazinyl, diketopiperazinyl, oxopiperidinyl, pyrrolyl, thienyl, imidazolyl, furyl, oxazolyl, etc.; W, Y = (substituted) Ph, pyridinyl, pyrimidinyl, thiazolyl, furyl, etc.; B = bond, ester, amide linkage], were prepared Thus, 3-[4''-(cyanomethoxy)- 2,3''-diisobutyl-3'-isopropyl-1,1':4',1''-terphenyl-4-yl]propanenitrile (preparation given) was stirred with aqueous NaOH in MeOH at 50° for 24 h to give 3-[4''-(carboxymethoxy)-2,3''-diisobutyl-3'-isopropyl-1,1':4',1''- terphenyl-4-yl]propanoic acid. The latter inhibited HIV-1 mediated cell-to-cell fusion with IC50 = 15.70 μg/mL.

MSTR 1

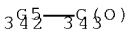


G1 = 8-2 11-4

G2 = 4-pyridyl / 315



G3 = 342-1 343-3



G4 = bond
G5 = NH
Patent location: claim 1
Note: or pharmaceutically acceptable salts

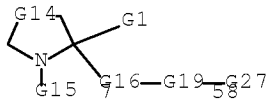
L24 ANSWER 16 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 137:288985 MARPAT Full-text
TITLE: Inhibitors of prenyl-protein transferase

INVENTOR(S): Desolms, S. Jane; Shaw, Anthony W.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002078702	A1	20021010	WO 2002-US9208	20020326
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002252502	A1	20021015	AU 2002-252502	20020326
PRIORITY APPLN. INFO.:			US 2001-280610P	20010330
			WO 2002-US9208	20020326

AB The present invention is directed to compds. which inhibit a prenyl-protein transferase (FTase) and the farnesylation of the oncogene protein Ras. The compds. of the present invention comprise non-prodrug, non-thiol compds. that contain a spirocyclic pyrrolidinyl moiety. The invention is further directed to chemotherapeutic compns. containing the compds. of this invention and methods for inhibiting a prenyl-protein transferase and the prenylation of the oncogene protein Ras.

MSTR 1



G1 = imidazolyl (opt. substd.)
G14 = (1-3) CH2
G16 = phenylene (opt. substd. by (1-4) G17)
G19 = 122-7 123-58

G22 = NH (opt. substd.)
G27 = pyridyl (opt. substd.)
Patent location: claim 1
Note: or pharmaceutically acceptable salts

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 17 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 135:357948 MARPAT Full-text
TITLE: Preparation of heterocyclic compounds as phosphodiesterase V (PDE V) inhibitors
INVENTOR(S): Yamada, Koichiro; Matsuki, Kenji; Omori, Kenji; Kikkawa, Kohei
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: PCT Int. Appl., 207 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083460	A1	20011108	WO 2001-JP2034	20010315
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001041142	A	20011112	AU 2001-41142	20010315
CA 2407231	A1	20021023	CA 2001-2407231	20010315
EP 1277741	A1	20030122	EP 2001-912373	20010315
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
NZ 522217	A	20040430	NZ 2001-522217	20010315
CN 1657523	A	20050824	CN 2004-10098098	20010315
US 2003229089	A1	20031211	US 2002-258545	20021025
US 7220736	B2	20070522		
MX 2002PA10693	A	20030310	MX 2002-PA10693	20021028
US 2004142930	A1	20040722	US 2003-699804	20031104
US 7273868	B2	20070925		
AU 2005203687	A1	20050908	AU 2005-203687	20050817
US 2008027037	A1	20080131	US 2007-889749	20070816

PRIORITY APPLN. INFO.:
JP 2000-130371 20000428
JP 2000-277652 20000913
AU 2001-41142 20010315
WO 2001-JP2034 20010315
US 2002-258545 20021025
US 2003-699804 20031104

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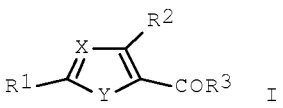
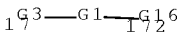


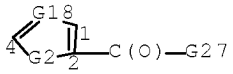
I

AB Compds. of the general formula (I) or pharmacol. acceptable salts thereof [wherein X is :CH or N; Y is NH, NR4, S, O, CH:N, N:CH, N:N, CH:CH, or the like; R1 is lower alkoxy, amino, a nitrogenous heterocyclic group, or a hydroxyl group substituted with a heterocyclic group (wherein each group may be substituted); R2 is either a lower alkylamino or lower alkoxy group which may be substituted with aryl, or a lower alkoxy group substituted with a nitrogenous aromatic heterocyclic group; and R3 is aryl, a nitrogenous heterocyclic group, lower alkyl, lower alkoxy, lower cycloalkoxy, a hydroxyl group substituted with a nitrogenous heterocyclic group, or amino (wherein each group may be substituted), or alternatively, R3 and the substituent of Y may be united to form a lactone ring] or pharmacol. acceptable salts thereof are prepared These compds. exhibit excellent PDE V inhibitory activity and are useful as preventive or therapeutic agents for various diseases due to dysfunction of the signal transduction through cGMP, in particular impotence, pulmonary hypertension, and diabetic renal failure paralysis (no data). Thus, 2-(hydroxymethyl)pyridine was treated wit NaH in THF at room temperature for 30 min and then condensed with 2-chloro-5-(3,4,5-trimethoxyphenylcarbonyl)-4-(3-chloro-4- methoxybenzylamino)pyrimidine (preparation given) in THF at room temperature for 1 h to give 2-(2-pyridylmethoxy)-5-(3,4,5-trimethoxyphenylcarbonyl)-4-(3- chloro-4-methoxybenzylamino)pyrimidine.

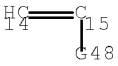
MSTR 1



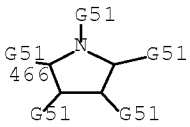
G1 = 4-17 1-172



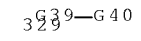
G2 = 14-4 15-2



G3 = 466



G18 = CH
G27 = 329



G39 = NH
G40 = pyridyl (opt. substd. by alkyl <containing 1-6 C>)
Patent location: claim 1
Note: additional ring formation also claimed
Note: substitution is restricted
Note: or pharmacologically acceptable salts

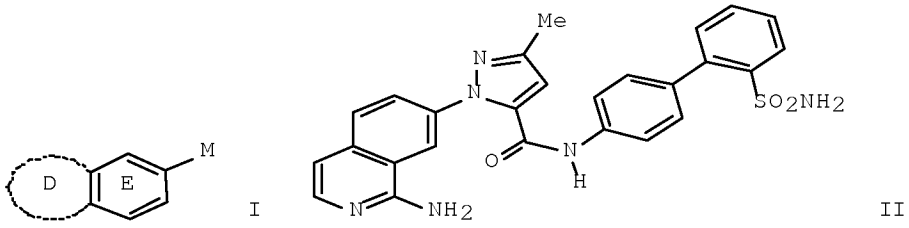
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 18 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 130:66494 MARPAT Full-text
TITLE: Preparation of novel guanidine mimics as factor Xa inhibitors
INVENTOR(S): Lam, Patrick Y.; Clark, Charles G.; Dominguez, Celia; Fevig, John Matthew; Han, Qi; Li, Renhua; Pinto, Donald Joseph-Phillip; Pruitt, James Russell; Quan, Mimi Lifen
PATENT ASSIGNEE(S): The Du Pont Merck Pharmaceutical Company, USA
SOURCE: PCT Int. Appl., 268 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9857951	A1	19981223	WO 1998-US12680	19980618
W: AU, BR, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ZA 9805247	A	19991217	ZA 1998-5247	19980617
CA 2291442	A1	19981223	CA 1998-2291442	19980618
AU 9879768	A	19990104	AU 1998-79768	19980618
AU 756755	B2	20030123		
EP 991638	A1	20000412	EP 1998-930361	19980618
EP 991638	B1	20050817		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
BR 9810137	A	20000808	BR 1998-10137	19980618
EE 9900583	A	20000815	EE 1999-583	19980618
EE 4153	B1	20031015		
HU 2000002686	A2	20020128	HU 2000-2686	19980618
HU 2000002686	A3	20020228		
JP 2002505686	T	20020219	JP 1999-504785	19980618
NZ 502370	A	20021025	NZ 1998-502370	19980618
AT 302198	T	20050915	AT 1998-930361	19980618
ES 2244064	T3	20051201	ES 1998-930361	19980618
RO 120543	B1	20060330	RO 1999-1317	19980618

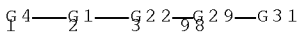
PL 192941	B1	20061229	PL 1998-337756	19980618
SK 285685	B6	20070607	SK 1999-1728	19980618
TW 544453	B	20030801	TW 1998-87109910	19980819
NO 9905965	A	19991203	NO 1999-5965	19991203
NO 318359	B1	20050307		
MX 9911908	A	20000531	MX 1999-11908	19991216
LV 12496	B	20010120	LV 1999-178	19991216
LT 4705	B	20000925	LT 1999-147	19991217
PRIORITY APPLN. INFO.:			US 1997-878884	19970619
			WO 1998-US12680	19980618

GI

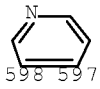


AB The title compds. [I; rings D-E represent guanidine mimics; ring D = CH2N:CH, CH2CH2N:CH, a 5-6 membered aromatic system containing 0-2 heteroatoms selected form the group N, O, and S; ring D is substituted with 0-2 R (substituents), provided that when ring D is unsubstituted, it contains at least one heteroatom; ring E contains 0-2 N atom and is substituted by 0-1 R; R = halo, OH, C1-3 alkoxy, etc.; M = (un)substituted pyrazole, imidazole, tetrazole, etc.], inhibitors of factor Xa which are useful in treating and preventing a thromboembolic disorder, were prepared and formulated. Thus, a multi-step synthesis of the title compound II, starting with 7-aminoisoquinoline, was described. A number of compds. I were found to exhibit a Ki of ≤ 15 μM against factor Xa.

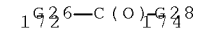
MSTR 1



G1 = 598-1 597-3



G4 = naphthyl (opt. substd. by 1 or more G5)
G22 = 172-2 174-98



G26 = NH (opt. substd.)
G28 = (0-3) CH2
G29 = phenylene (opt. substd.)
G31 = 454

G48 = bond
Derivative: or pharmaceutically acceptable salts
Patent location: claim 1
Note: additional ring formation also claimed
Note: substitution is restricted
Note: additional substitution also claimed
Stereochemistry: or stereoisomers

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 19 OF 19 MARPAT COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 130:81510 MARPAT Full-text
TITLE: Preparation of phenylpyrazolecarboxamides as coagulation factor Xa inhibitors
INVENTOR(S): Galemmo, Robert Anthony, Jr.; Dominguez, Celia; Fevig, John Matthew; Han, Qi; Lam, Patrick Yuk-sun; Pinto, Donald Joseph Philip; Pruitt, James Russell; Quan, Mimi Lifen
PATENT ASSIGNEE(S): The Du Pont Merck Pharmaceutical Company, USA
SOURCE: PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9857937	A2	19981223	WO 1998-US12681	19980618
WO 9857937	A3	19990318		
W: AU, BR, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
ZA 9805251	A	19991217	ZA 1998-5251	19980617
CA 2290982	A1	19981223	CA 1998-2290982	19980618
AU 9881503	A	19990104	AU 1998-81503	19980618
US 5998424	A	19991207	US 1998-99752	19980618
EP 991625	A2	20000412	EP 1998-931355	19980618
EP 991625	B1	20050601		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO

BR 9810151	A	20000808	BR 1998-10151	19980618
EE 9900584	A	20000815	EE 1999-584	19980618
SI 20208	A	20001031	SI 1998-20043	19980618
HU 2000003906	A2	20010528	HU 2000-3906	19980618
JP 2002507968	T	20020312	JP 1999-504786	19980618
AT 296805	T	20050615	AT 1998-931355	19980618
ES 2239806	T3	20051001	ES 1998-931355	19980618
PT 991625	T	20051031	PT 1998-931355	19980618
US 6403620	B1	20020611	US 1999-393782	19990910
MX 9910588	A	20010910	MX 1999-10588	19991117
LV 12516	B	20010320	LV 1999-177	19991216
NO 9906316	A	19991217	NO 1999-6316	19991217
LT 4702	B	20000925	LT 1999-146	19991217
US 2003092740	A1	20030515	US 2002-150698	20020516
US 6602895	B2	20030805		
PRIORITY APPLN. INFO.:			US 1997-50219P	19970619
			US 1997-878885	19970619
			US 1998-76691P	19980227
			US 1998-99752	19980618
			WO 1998-US12681	19980618
			US 1999-393782	19990910

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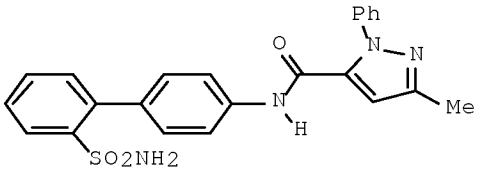

II

AB EZ1M [I; E = halo, OH, alkyl, alkoxy, etc.; M = Z2ZAB; A = (un)substituted carbocyclylene, -heterocyclylene; B = H, Y, XY; X = alkylene, CO, O, (un)substituted NH, etc.; Y = amino(alkyl), substituted carbocyclyl, -heterocyclyl, etc.; Z = bond, (heteroatom- or functional group-interrupted) alkylene, etc.; Z1 = (un)substituted Ph, Z2 = N-containing heteroarylene, etc.] were prepared Thus, MeCOCH2C(:NOMe)CO2Et was cyclocondensed with PhNHNH2 and the product amidated by 4-(H2N)C6H4C6H4(SO2NHCMe3)-2 to give, after deprotection, title compound II. Data for biol. activity of I were given.

MSTR 1

G1 = 598-1 597-3

```
G4      = Ph (substd. by 1 or more G5)
G22     = 172-2 174-98
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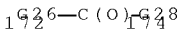

```
G26     = NH (opt. substd.)
G28     = (0-3) CH2
G29     = phenylene (opt. substd.)
G31     = 454
```

```
G48     = bond
Derivative:                 or pharmaceutically acceptable salts
Patent location:            claim 1
Note:                       additional ring formation also claimed
Note:                       substitution is restricted
Note:                       additional substitution also claimed
Stereochemistry:            or stereoisomers


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                OR "KOIKE AKIO"/AU)
L18         151 SEA ("IWAHASHI Y"/AU OR "IWAHASHI Y A G C L"/AU OR "IWAHASHI
                YASUTOMI"/AU)
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L20          134 SEA ("KIKUGAWA S"/AU OR "KIKUGAWA S A G C L"/AU OR "KIKUGAWA S
                 M M"/AU OR "KIKUGAWA SHINNYA"/AU OR "KIKUGAWA SHINYA"/AU)
L21         1603 SEA (L17 OR L18 OR L19 OR L20)
L22          201 SEA L21 AND (SI OR SILIC?)
L23           39 SEA L22 AND (TI OR TITAN? OR TIO2)


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PROCESSING COMPLETED FOR L23
L25           24 DUP REM L23 (15 DUPLICATES REMOVED)
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                 ANSWERS '20-24' FROM FILE WPIX

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L25  ANSWER 1 OF 24  CAPLUS  COPYRIGHT 2008 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2007:327846  CAPLUS  Full-text
DOCUMENT NUMBER:          146:363765
TITLE:                    Tin- and titanium-doped silicate glass with low
                          thermal expansion and low concave defects for EUV
                          photolithography
INVENTOR(S):              Kawata, Mitsuhiro; Takada, Akira; Hayashi, Hideaki;
                          Sugimoto, Naoki; Kikugawa, Shinya
PATENT ASSIGNEE(S):       Asahi Glass Company, Limited, Japan
SOURCE:                   PCT Int. Appl., 23pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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     WO 2007032533         A1    20070322    WO 2006-JP318543        20060913
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR,
             KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW,
             MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,
             SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     JP 2007238425         A     20070920    JP 2006-246763          20060912
PRIORITY APPLN. INFO.:                       JP 2005-269578       A  20050916
                                             JP 2005-375010       A  20051227
                                             JP 2006-31021        A  20060208
AB   A silicate glass suitable as optical material for extreme-UV lithog. has a low
     coefficient of thermal expansion over 0-100° (0±250 ppb/℃), and is produced
     without formation of concave defects during polishing to achieve a high level
     of flatness.  The silica glass contains 0.1-10% of SnO2 and 3-10% of TiO2, and
     has a homogeneity of the coefficient of thermal expansion at 0-100° of 50-200
     ppb/℃, and a Vickers hardness ≤650.
REFERENCE COUNT:          5     THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
```

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2007:638871 CAPLUS Full-text
DOCUMENT NUMBER: 147:77519
TITLE: Sealing compositions for colored cathode ray tubes
INVENTOR(S): Tanabe, Ryuichi; Watanabe, Kazunari; Takimoto, Yasuyuki; Segawa, Masaru; Horie, Noritoshi
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007145662	A	20070614	JP 2005-343774	20051129

PRIORITY APPLN. INFO.: JP 2005-343774 20051129

AB The compns. contain 80-96 mass% low-m.p. crystallizable glass powder and 4-20 mass% low-expansion ceramic filler, where the glass powder (free from F) contains: PbO 75-80, ZnO 9-13, B2O3 7-10, SiO2 1.65-2.4, BaO 1.5-2.3, SrO 0-1.5, CaO 0-1.5, PbO + ZnO 86-91 mass%, and ZnO/PbO ratio 0.11-0.17, and the ceramic filler contains: zircon powder 1-5, and Pb titanate powder 3-15 mass%. The obtained cathode ray tubes have high compressive strength.

L25 ANSWER 3 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2007:584358 CAPLUS Full-text
DOCUMENT NUMBER: 146:526331
TITLE: Method for molding of optical silica glasses containing TiO2 by using coated graphite molds
INVENTOR(S): Kawada, Mitsuhiro; Koike, Akio; Iwahashi, Yasuomi; Sugimoto, Naoki; Kikugawa, Shinya
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007131472	A	20070531	JP 2005-324913	20051109

PRIORITY APPLN. INFO.: JP 2005-324913 20051109

AB The title method comprises following steps: coating a suspension solution containing average particle diameter 0.01-5 μm SiC on graphite molds to give coating amount 0.005-0.2 g/cm2, further coating a suspension solution containing 10-50 weight% average particle diameter 0.01-10 μm ZrO2 and 50-90 weight% average particle diameter 5-150 μm SiC to give coating amount 0.005-0.2 g/cm2, press molding the TiO2-containing silica glasses at 1500-1800°. The method provides high production efficiency by preventing foaming of the glasses.

L25 ANSWER 4 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2007:251678 CAPLUS Full-text

DOCUMENT NUMBER: 146:279075
TITLE: Molding of silica glass containing TiO2
INVENTOR(S): Kawada, Mitsuhiro; Koike, Akio; Iwahashi, Yasuomi; Sugimoto, Naoki; Kikugawa, Shinya
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007055842	A	20070308	JP 2005-242846	20050824
PRIORITY APPLN. INFO.:			JP 2005-242846	20050824

AB The method involves applying a suspension containing SiC particles having average diameter 0.01-150 μm on a molding surface side of a graphite mold to satisfy coating weight per unit area 0.005-0.2 g/cm2, setting TiO2-containing glass in the mold, and press-molding the glass at 1500-1800° to give a molded glass with desired shape. Bubble generation during molding is prevented, so that the molded glass is suitable for optical parts used in EUV lithog.

L25 ANSWER 5 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2006:768458 CAPLUS Full-text
DOCUMENT NUMBER: 145:193629
TITLE: Production of titanium silicate optical glass with low hydrogen content for extreme UV lithography
INVENTOR(S): Koike, Akio; Iwahashi, Yasutomi; Shimodaira, Noriaki; Kikugawa, Shinya; Sugimoto, Naoki
PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan
SOURCE: PCT Int. Appl., 34pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006080241	A2	20060803	WO 2006-JP300777	20060113
WO 2006080241	A3	20060921		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006210404	A	20060810	JP 2005-16880	20050125
EP 1841702	A2	20071010	EP 2006-700922	20060113
R: BE, DE, FR, GB, IT, NL				
US 2007207911	A1	20070906	US 2007-747698	20070511
PRIORITY APPLN. INFO.:			JP 2005-16880 A	20050125

WO 2006-JP300777 W 20060113

AB Conventional TiO2-SiO2 glass contains hydrogen atoms which, during deposition under ultrahigh vacuum conditions, will diffuse in the chamber and H2 mols. will be taken into the film formed. Hydrogen mols. will readily diffuse and thus change the optical characteristics of the multilayer film. In an optical material for EUV lithog., a multilayer film is deposited by ion beam sputtering on a silica glass having a TiO2 concentration of 3-12 mol.% and a hydrogen mol. content <5x1017 mols./cm3 in the glass.

L25 ANSWER 6 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2006:31365 CAPLUS Full-text
DOCUMENT NUMBER: 144:112518
TITLE: Production of TiO2-doped silica glass with zero thermal expansion coefficient over wide temperature range
INVENTOR(S): Koike, Akio; Iwahashi, Yasutomi; Takimoto, Yasuyuki; Kikugawa, Shinya
PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006004169	A1	20060112	WO 2005-JP12519	20050630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1761469	A1	20070314	EP 2005-757800	20050630
R: DE, FR, GB, IT, NL				
JP 2008505043	T	20080221	JP 2006-548436	20050630
KR 2007028354	A	20070312	KR 2006-721793	20061020
US 2007042893	A1	20070222	US 2006-589875	20061031

PRIORITY APPLN. INFO.: JP 2004-195682 A 20040701
WO 2005-JP12519 W 20050630

AB A TiO2-containing silica glass with zero coefficient of thermal expansion over a wide temperature range comprises 3-10 weight% of TiO2, a OH group concentration of at most 600 ppm by weight and a Ti3+ concentration <70 ppm by weight The glasses have a fictive temperature of 1200° or less, a coefficient of thermal expansion of 0±150 ppb/℃ over 0-100° range, and an internal transmittance T400-700 per 1 mm thickness at 400-700 nm of at least 80%. The TiO2-doped silicate glasses are produced by forming a porous glass body, fluorine-doping before oxygen treatment, densification and vitrification.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 7

ACCESSION NUMBER: 2006:359174 CAPLUS Full-text
DOCUMENT NUMBER: 144:374820
TITLE: Production of high transparent titanium silicate glass with zero thermal expansion coefficient in wide temperature region
INVENTOR(S): Iwahashi, Yasuomi; Koike, Akio
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006103988	A	20060420	JP 2004-289783	20041001
PRIORITY APPLN. INFO.:			JP 2004-289783	20041001

AB In the production process, flame hydrolytically deposited porous TiO2-SiO2 glass soot preforms are heated in nonreducing atmospheric to 1100-1650° to give sinters with d. of 2.0-2.3 g/cm3, then further heated to 1400-1700° in atmospheric of ≥0.01 Mpa for vitrification into high-transparent glass. Preferably, the resultant glass is heated to a temperature of equal to or above softening point and formed into desired shape. In the production, fluorine doping may be carried out so as to widen the temperature range of zero thermal expansion coefficient The production process inhibits generation of Ti3+ during sintering, so that the glass shows high transparency and is suitable for EUV (extreme-UV) lithog. exposure apparatus

L25 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 8
ACCESSION NUMBER: 2005:635024 CAPLUS Full-text
DOCUMENT NUMBER: 143:137539
TITLE: Silica glass as periphery materials for optical analysis instrument and IR heating devices
INVENTOR(S): Koike, Akio; Iwahashi, Yasuomi
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005194118	A	20050721	JP 2004-389	20040105
WO 2005066090	A1	20050721	WO 2004-JP19834	20041228
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2006276323	A1	20061207	US 2006-435887	20060518

US 7294595 B2 20071113
PRIORITY APPLN. INFO.: JP 2004-389 A 20040105
WO 2004-JP19834 A1 20041228

AB The glass contains 3-10 mass% of TiO2, and has thermal expansion coefficient at 0-100° CTE0-100 0±300 ppb/°, and inner transmittance at 200-700 nm wavelength range and thickness of 1 mm T200-700 ≤80%. Preferably, the glass also contains a reducing substance with respect to TiO2.

L25 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 9
ACCESSION NUMBER: 2004:878346 CAPLUS Full-text
DOCUMENT NUMBER: 141:353842
TITLE: Silica glass containing TiO2 with minimal thermal expansion used for extreme UV lithography
INVENTOR(S): Iwahashi, Yasutomi; Koike, Akio
PATENT ASSIGNEE(S): Asahi Glass Company Limited, Japan
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089839	A1	20041021	WO 2004-JP4833	20040402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005022954	A	20050127	JP 2004-65275	20040309
EP 1608598	A1	20051228	EP 2004-725504	20040402
EP 1608598	B1	20070718		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 2005245382	A1	20051103	US 2005-172872	20050705

PRIORITY APPLN. INFO.:
JP 2003-100495 A 20030403
JP 2003-164669 A 20030610
JP 2004-65275 A 20040309
WO 2004-JP4833 W 20040402

AB A silica glass containing TiO2 has a fictive temperature of at most 1200°, an OH group concentration of at most 600 ppm, and a coefficient of thermal expansion of 0±200 ppb/℃ at the temperature range from 0 to 100°.
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 10
ACCESSION NUMBER: 2004:878345 CAPLUS Full-text
DOCUMENT NUMBER: 141:353841
TITLE: Silica glass containing TiO2 and optical material for Extreme UV lithography
INVENTOR(S): Iwahashi, Yasutomi; Koike, Akio

PATENT ASSIGNEE(S): Asahi Glass Company Limited, Japan
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089838	A1	20041021	WO 2004-JP4829	20040402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004315351	A	20041111	JP 2004-76312	20040317
EP 1608599	A1	20051228	EP 2004-725542	20040402
EP 1608599	B1	20071017		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 2005245383	A1	20051103	US 2005-174533	20050706

PRIORITY APPLN. INFO.:
JP 2003-100798 A 20030403
JP 2003-100799 A 20030403
JP 2004-76312 A 20040317
WO 2004-JP4829 W 20040402

AB A silica glass containing TiO2, characterized in that the fluctuation of the refractive index (Δn) is at most 2·10-4 within the area of 30 mm to 30 mm in at least one plane. A TiO2-containing silica glass is characterized in the TiO2 concentration at least 1 weight%, and the striae pitch is at most 10 μm. An optical material for EUV lithog. is made of a silica glass containing TiO2, and the fluctuation of the refractive index (Δn) is at most 2·10-4 in a plane perpendicular to the incident light direction. The resulting optical material for EUV lithog. has the difference between the maximum value and the min. value of the TiO2 concentration at most 0.06 weight% in a plane perpendicular to the incident light direction.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 11
ACCESSION NUMBER: 2004:872761 CAPLUS Full-text
DOCUMENT NUMBER: 141:336158
TITLE: Manufacture of fluorine-doped titanium silicate glass for extreme UV photolithography via flame hydrolysis and annealing
INVENTOR(S): Iwahashi, Yasutomi; Koike, Akio
PATENT ASSIGNEE(S): Asahi Glass Company Limited, Japan
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089836	A1	20041021	WO 2004-JP4845	20040402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005104820	A	20050421	JP 2004-72762	20040315
EP 1608596	A1	20051228	EP 2004-725500	20040402
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
US 2005272590	A1	20051208	US 2005-172950	20050705
PRIORITY APPLN. INFO.:			JP 2003-100496 A	20030403
			JP 2003-321729 A	20030912
			JP 2004-72762 A	20040315
			WO 2004-JP4845 W	20040402

AB A titanium silicate glass is produced with a fictive temperature of at most 1200°, a F concentration of at least 100 ppm and a coefficient of thermal expansion of 0±200 ppb/℃ at 0-100°. The silicate glass is manufactured by forming a porous glass body on a target quartz glass particles obtained by flame hydrolysis of glass-forming materials (such as TiCl4 and SiCl4), then obtaining a fluorine-containing porous glass body later transformed into a vitrified non-porous body that is formed prior to carrying out an annealing treatment.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 12
ACCESSION NUMBER: 2002:672062 CAPLUS Full-text
DOCUMENT NUMBER: 137:205081
TITLE: Alkali alkaline earth titanosilicate glass for substrate of recording media and optical instruments
INVENTOR(S): Koike, Akio; Nakajima, Tetsuya; Nakao, Yasumasa; Kobayashi, Tomoyuki; Maeda, Takashi
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002249336	A	20020906	JP 2001-69099	20010312
PRIORITY APPLN. INFO.:			JP 2000-98798 A	20000331
			JP 2000-390818 A	20001222

AB The title glass contains SiO2 1-45, TiO2 20-50, B2O3 0-30, Al2O3 0-20, MgO 0-20, CaO 0-30, SrO 0-20, BaO 0-30, ZnO 0-20, ZrO2 0-20, Li2O 0-15, Na2O 0-30, and K2O 0-30 mol.%. The glass has high Young's modulus and expansion coefficient and is especially suitable for substrates of recording media or optical circuits and optical lenses.

L25 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 13
ACCESSION NUMBER: 2001:703326 CAPLUS Full-text
DOCUMENT NUMBER: 135:246067
TITLE: Glass for substrate, and its use in recording medium and optical circuit part
INVENTOR(S): Koike, Akio; Nakajima, Tetsuya
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001261365	A	20010926	JP 2000-84060	20000324
PRIORITY APPLN. INFO.:			JP 2000-84060	20000324

AB The glass contains Al2O3 10-50, CaO 20-70, SiO2 0-25, MgO 0-25, SrO 0-25, BaO 0-25, ZnO 0-25, TiO2 0-25, ZrO2 0-15, Li2O 0-15, Na2O 0-15, K2O 0-15, Y2O3 0-25, and La2O3 0-25 mol%. The glass may have Young's modulus ≥90GPa and average linear expansion coefficient at 50-350° ≥70 × 10-7/℃. The glass with high Young's modulus and expansion coefficient, is suitable for magnetic disks, optical disks, optical band-pass filters, etc.

L25 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 14
ACCESSION NUMBER: 2001:356593 CAPLUS Full-text
DOCUMENT NUMBER: 134:347490
TITLE: Glass for information recording substrate and glass substrate for information recording medium
INVENTOR(S): Koike, Akio; Nakajima, Tetsuya; Nakao, Yasumasa
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001134925	A	20010518	JP 1999-343618	19991202
PRIORITY APPLN. INFO.:			JP 1999-238778 A	19990825

AB A glass having a high Young's modulus and resistant to devitrification comprises 30 ≤ SiO2 ≤ 60 and 1 ≤ Al2O3 < 20 and 1 ≤ MgO < 20, CaO ≤ 25, SrO ≤ 15, ZnO ≤ 20, TiO2 ≤ 10, ZrO2 ≤ 10, Li2O ≤ 15, Na2O ≤ 2, Y2O3 ≤ 25, La2O3 ≤ 25 in mol% while Al2O3 + MgO < 28 and Al2O3 + MgO + CaO < 40 in mol%. A glass substrate for an information recording medium such as a magnetic disk or optical disk comprises the above glass.

L25 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN DUPLICATE 15
ACCESSION NUMBER: 2000:907180 CAPLUS Full-text
DOCUMENT NUMBER: 134:65364
TITLE: Glass for magnetic recording medium and glass substrate for the medium

INVENTOR(S): Nakajima, Tetsuya; Nakao, Yasumasa; Koike, Akio
PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000357318	A	20001226	JP 2000-80690	20000322
US 6387510	B1	20020514	US 2000-546609	20000410
PRIORITY APPLN. INFO.:			JP 1999-105653 A	19990413

AB The glass having Young's modulus ≥85 GPa consists of SiO2 60-72, Al2O3 2-9, MgO 3-9, CaO 2-10, SrO 0-15, ZnO 0-4, TiO2 0-8, ZrO2 0-4, Li2O 1-12, Na2O 0-8, K2O 0-5, Y2O3 0-5, and La2O3 0-5 mol% and the amount of Li2O, Na2O, and K2O is 4-15 mol%. The substrate for the magnetic recording medium is made of the glass and number of fixed substances with size ≥10 μm is ≤1/cm2 and the substances with size from ≥1 μm to <10 μm is ≤105/cm2 both on the surface after 20 h in steam at 120° and 2 atmospheric The substrate with high Young's modulus and weather resistance is suitable for mass production of magnetic disks.

L25 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:338368 CAPLUS Full-text
DOCUMENT NUMBER: 145:237292
TITLE: Novel low thermal expansion material for EUV application
AUTHOR(S): Kawata, Mitsuhiro; Takada, Akira; Hayashi, Hideaki; Sugimoto, Naoki; Kikugawa, Shinya
CORPORATE SOURCE: Research Center, Asahi Glass Co., Ltd., 1150 Hazawa-cho, Kanagawa-ku, Yokohama-shi, Kanagawa, 221-8755, Japan
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2006), 6151(Pt. 1, Emerging Lithographic Technologies X), 61511A/1-61511A/7
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In extreme UV (EUV) lithog. technol., ultra low thermal expansion material is required as photomask substrate. We have previously developed Ti-doped silica glass which exhibits both ultra low coefficient of thermal expansion (CTE) and high homogeneity for EUV substrate. On the other hand, we have been investigating other candidate materials which have low CTE, from the viewpoint of structural chemical Silica glass is well-known as a low thermal expansion material and the reason is explained that in the open structure of silica glass two factors, expansion and shrinkage, compete with each other with increase in temperature The network of silica glass consists of tetrahedra like quartz crystal. In this structure, Si is stably present with a valence of 4 and a coordination number of 4. We have carried out an atomistic simulation and estimated the volume change of oxide materials which may have the same structural transformation mechanism as SiO2. As a result, the volume of SnO2 with quartz structure (quartz-SnO2), in which Sn was present with a valance of 4 and a coordination number of 4, decreased with increase in temperature, i.e., the d. of quartz-SnO2 increased. Thus, it was indicated that the glass with lower CTE than that of silica glass could be obtained with

substituting Sn for Si. Based on this hypothesis, we have prepared Sn-doped silica glass by Asahi silica glass producing method. The synthesized Sn-doped silica glass exhibited lower CTE than that of an ordinary silica glass.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:300276 CAPLUS Full-text
DOCUMENT NUMBER: 145:219913
TITLE: Temperature dependences of optical path length in fluorine-doped silica glass and bismuthate glass
AUTHOR(S): Koike, Akio; Sugimoto, Naoki
CORPORATE SOURCE: Research Center, Asahi Glass Co., Ltd., 1150, Hazawa-cho, Kanagawa-ku, Yokohama-City, Kanagawa, Japan
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2006), 6116(Optical Components and Materials III), 61160Y/1-61160Y/8
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Temperature dependences of optical path length (dS/dT; calculated using the equation, dS/dT = dn/dT + na, where a is coefficient of thermal expansion, n is refractive index and dn/dT is temperature coefficient of refractive index) in various oxide glasses were investigated. The dS/dT is generally difficult to adjust by change of glass composition because dn/dT and a are interrelated. However, low dS/dT materials are desired for optical applications such as athermal devices, and high dS/dT materials can be used for thermo-optic devices. Pure silica glass is well-known as a typical low dS/dT material but still not sufficient. Fluorine-doped silica glass showed a lower dS/dT than that of pure silica glass. By fluorine-doping in silica glass, refractive index and dn/dT decreased but a near room temperature stayed at the same level. As a result, the dS/dT decreased with increasing fluorine concentration On the other hand, bismuthate glass showed the highest dS/dT in this study. Most glasses having high a such as tellurite glass showed neg. dn/dT. However, bismuthate glasses showed pos. dn/dT in spite of high a. As a result, bismuthate glasses showed quite high dS/dT. These results indicate that dS/dT of the glass can be controllable and that fluorine doped silica glass and bismuthate glass are appropriate candidate materials for optical applications.
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:374084 CAPLUS Full-text
DOCUMENT NUMBER: 146:406172
TITLE: Temperature dependences of optical path length in inorganic glasses
AUTHOR(S): Koike, Akio; Sugimoto, Naoki
CORPORATE SOURCE: Res. Cent., Asahi Glass Co., Ltd., Japan
SOURCE: Asahi Garasu Kenkyu Hokoku (2006), 56, 1-6
CODEN: AGKHAD; ISSN: 0004-4210
PUBLISHER: Asahi Garasu K.K. Chuo Kenkyusho
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Temperature dependences of optical path length (dS/dT; calculated using the equation, $dS/dT=dn/dT+n\alpha$, where α is the coefficient of thermal expansion, n is the refractive index and dn/dT is the temperature coefficient of refractive index) in various oxide glasses were investigated. The dS/dT is generally

difficult to be controlled by change of glass composition because dn/dT and α are interrelated. This experiment also showed that the values of dS/dT for most glasses ranged between 10 ppm/° and 20 ppm/° except for bismuthate glasses. Pure silica glass is well-known as a typical material with low dS/dT. However, fluorine-doped silica glass showed a lower dS/dT than that of pure silica glass. By fluorine-doping in silica glass, refractive index and dn/dT decreased but α stayed at the same level near room temperature As a result, the dS/dT decreased with increasing fluorine concentration On the other hand, a bismuthate glass showed the highest dS/dT in this study. Although most glasses having high α such as tellurite glass showed neg. dn/dT, bismuthate glasses showed pos. dn/dT in spite of high α. It was assumed that bismuthate glass showed high dn/dT due to high polarizability of Bi2O3 which is similar to PbO. These results indicate that dS/dT of glass can be designed by considering the electronic configuration of its components and the glass structure.

L25 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1973:432751 CAPLUS Full-text
DOCUMENT NUMBER: 79:32751
ORIGINAL REFERENCE NO.: 79:5319a,5322a
TITLE: Photosensitive coating compositions containing pigments
INVENTOR(S): Takimoto, Yasuyuki; Umeda, Yasushi
PATENT ASSIGNEE(S): Nippon Paint Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48028037	A	19730413	JP 1971-61797	19710814
JP 50028094	B	19750912		

PRIORITY APPLN. INFO.: JP 1971-61797 A 19710814

AB Pigmented, photosensitive poly(vinyl alc.) (I) [9002-89-5] coating compns. could be cured in the presence of ammonium dichromate [7789-09-5] and basic lead silicochromate [11097-70-4] to give coatings with better resistance to solvent, water, and weather than com. acrylic latex paints. For example, a photosensitive resin solution was prepared from I (degree of saponification 88 mole%) 120, water 680, acrylonitrile [107-13-1] 86, Et acrylate [140-88-5] 70, and diacetyl 0.3 part. A paste (553 parts) from clay 200, CaCO3 60, 25% aqueous anionic surfactant 10, HOCH2CH2OH 20, o-C6H4(CO2Bu)2 20, octyl alc. 0.5, 2% aqueous Methocel 50, and water 100 parts was mixed with 200 parts TiO2 to give a pigment composition which was mixed with the resin solution 274, 30% aqueous ammonium dichromate 76, and basic Pb silicochromate 50 parts to give a coating composition The composition was used alone or together with com. acrylic latex paints.

L25 ANSWER 20 OF 24 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN
ACCESSION NUMBER: 2007-380717 [36] WPIX
DOC. NO. CPI: C2007-137669 [36]
DOC. NO. NON-CPI: N2007-284544 [36]
TITLE: Processing of porous glass used in manufacture of optical material, involves controlling pressure of space between chamber and furnace core pipe higher than pressure in

furnace core pipe, while supplying inert gas to space
DERWENT CLASS: L01; S02; U11; X25
INVENTOR: INOGUCHI H; IWAHASHI Y; MATSUMOTO I; NAGANO T; OGAWA T
PATENT ASSIGNEE: (ASAG-C) ASAHI GLASS CO LTD
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 2007051020	A	20070301	(200736)*	JA	11[1]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2007051020	A	JP 2005-236549	20050817

PRIORITY APPLN. INFO: JP 2005-236549 20050817
AN 2007-380717 [36] WPIX
AB JP 2007051020 A UPAB: 20070608
NOVELTY - A process gas is supplied to a furnace core pipe (12) in which porous glass is accommodated. The furnace core pipe is installed in a chamber (14) provided with a heater (28), and sealed by a seal portion (16) having heat resistance and air permeability. While supplying an inert gas to the space (34) between chamber and furnace core pipe, the pressure of the space is controlled higher than the pressure in the furnace core pipe.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for processing apparatus (10) of porous glass.
USE - For processing porous glass used in manufacture of optical material used for optical lithography using extreme UV light as exposure light source.
ADVANTAGE - The method enables efficient processing of porous glass without requiring a large-sized heating furnace.
DESCRIPTION OF DRAWINGS - The figure shows the partial cross-section of the processing apparatus. (Drawing includes non-English language text)
Processing apparatus (10)
Furnace core pipe (12)
Chamber (14)
Seal portion (16)
Space (34)

L25 ANSWER 21 OF 24 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN
ACCESSION NUMBER: 2007-214653 [22] WPIX
DOC. NO. CPI: C2007-078821 [22]
DOC. NO. NON-CPI: N2007-159524 [22]
TITLE: Manufacture of porous titania-silica vitreous material for optical component, involves rotating glass particles-deposited master rod suspended by rotation mechanism, and growing porous vitreous material at preset conditions
DERWENT CLASS: L01; U11
INVENTOR: IWAHASHI Y; NAGANO T; SOMEYA K
PATENT ASSIGNEE: (ASAG-C) ASAHI GLASS CO LTD
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC

JP 2007045638	A	20070222 (200722)*	JA 7[3]

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2007045638	A	JP 2005-228589	20050805

PRIORITY APPLN. INFO: JP 2005-228589 20050805
AN 2007-214653 [22] WPIX
AB JP 2007045638 A UPAB: 20070402
NOVELTY - Glass particles of titania-silica vitreous material are deposited at master rod (12). The rod suspended by rotation mechanism (16), is rotated at 25 rpm or more. Growth of porous titania-silica vitreous material is carried out at 5 kg or more in a state at which intrinsic frequency (f1) is more than oscillation number (f2) of rotating mechanism. The frequency (f1) is reduced and number (f2) is made unstable by weight increase of porous titania-silica vitreous material growth. Thus, manufacture of porous titania-silica vitreous material is enabled.
USE - For manufacturing porous titania-silica vitreous material used for manufacturing optical component used for optical lithography such as extreme ultraviolet light lithography.
ADVANTAGE - The porous titania-silica vitreous material of required weight is efficiently manufactured.
DESCRIPTION OF DRAWINGS - The figure shows the structural drawing of master-rod rotating mechanism of porous titania-silica vitreous material manufacturing apparatus.
Master rod (12)
Rotation mechanism (16)
Burner (18)
Front-end of master rod (20)
Support (22)

L25 ANSWER 22 OF 24 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN
ACCESSION NUMBER: 2004-114776 [12] WPIX
DOC. NO. CPI: C2004-047057 [12]
DOC. NO. NON-CPI: N2004-091509 [12]
TITLE: Optical element such as optical fiber grating, etalon, contains glass component optionally containing alkali metal oxide, which has small optical path length change with respect to temperature change
DERWENT CLASS: L01; P81; V07
INVENTOR: KOIKE A; SUGIMOTO N
PATENT ASSIGNEE: (ASAG-C) ASAHI GLASS CO LTD
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
JP 2004021089	A	20040122 (200412)*		JA	6[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2004021089	A	JP 2002-178470	20020619

PRIORITY APPLN. INFO: JP 2002-178470 20020619
AN 2004-114776 [12] WPIX
AB JP 2004021089 A UPAB: 20050528
NOVELTY - The optical element contains glass component having small optical path length change with respect to temperature change. The glass component optionally contains 1% or less of alkali metal oxide.

DETAILED DESCRIPTION - The optical element suitable for light of wavelength 450-1700 nm, contains glass as a component. The glass component has dS/dT (optical path length change/temperature change) of 8.9-10-6/degreesC or less satisfying the relation DS/dT = dn/dT+n(alpha), where dn/dT is temperature change rate at 25degreesC, alpha is coefficient of linear expansion at 25degreesC and n is refractive index with respect to light of wavelength 1550 nm. The glass component optionally contains 1% or less of alkali metal oxide. The glass contains 90-98.8 mass% silica, 1.2-10% fluorine, 0-8 mass% each of borate, alumina, phosphorous pentoxide and titania.

USE - Optical elements such as optical fiber grating, etalon (claimed), optical lens and prism.

ADVANTAGE - An optical element containing glass component with low alkali metal oxide content and small optical path length change with respect to temperature change, is obtained.

L25 ANSWER 23 OF 24 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN
ACCESSION NUMBER: 1998-232576 [21] WPIX
CROSS REFERENCE: 1999-424746
DOC. NO. CPI: C1998-072656 [21]
TITLE: Method for removing thin film using ammonium or alkali metal salt or acid salt - by applying powder or solution to a thin film formed on substrate such as automobile glass and heating, where film is oxide of e.g. cobalt or titanium on window glass of automobile
DERWENT CLASS: L01
INVENTOR: TAKIMOTO Y
PATENT ASSIGNEE: (ASAG-C) ASAHI GLASS CO LTD
COUNTRY COUNT: 23

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
EP 838442	A1	19980429	(199821)*	EN	6[6]	
US 6153535	A	20001128	(200063)	EN		
EP 838442	B1	20010131	(200108)	EN		
DE 69704013	E	20010308	(200121)	DE		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 838442 A1		EP 1997-118450	19971023
US 6153535 A		US 1997-955742	19971022
DE 69704013 E		DE 1997-69704013	19971023
EP 838442 B1		EP 1997-118450	19971023
DE 69704013 E		EP 1997-118450	19971023

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69704013 E	Based on	EP 838442 A

PRIORITY APPLN. INFO: JP 1996-281068 19961023
AN 1998-232576 [21] WPIX
CR 1999-424746
AB EP 838442 A1 UPAB: 20050521
A thin film is removed from a substrate by applying a powder or solution of a salt and heating to remove the film from the applied region, wherein the salt has some or all of the hydrogen ions of the acid replaced by ammonium or alkali metal ions.
ADVANTAGE - The film is removed without the need to mask the surrounding regions, and can also include a metal nitride or a metal.

Member(0002)
ABEQ US 6153535 A UPAB 20050521
A thin film is removed from a substrate by applying a powder or solution of a salt and heating to remove the film from the applied region, wherein the salt has some or all of the hydrogen ions of the acid replaced by ammonium or alkali metal ions.
ADVANTAGE - The film is removed without the need to mask the surrounding regions, and can also include a metal nitride or a metal.

Member(0003)
ABEQ EP 838442 B1 UPAB 20050521
A thin film is removed from a substrate by applying a powder or solution of a salt and heating to remove the film from the applied region, wherein the salt has some or all of the hydrogen ions of the acid replaced by ammonium or alkali metal ions.
ADVANTAGE - The film is removed without the need to mask the surrounding regions, and can also include a metal nitride or a metal.

L25 ANSWER 24 OF 24 WPIX COPYRIGHT 2008 THE THOMSON CORP on STN
ACCESSION NUMBER: 1997-402432 [37] WPIX
DOC. NO. CPI: C1997-129815 [37]
DOC. NO. NON-CPI: N1997-334735 [37]
TITLE: Lithographic plate material for laser direct make-up - comprises recording layer which includes particulate-dispersed thermoplastic polymer matrix, and is obtainable by pulsed-laser irradiation
DERWENT CLASS: A26; A89; G07; P75; S06
INVENTOR: ARIMATSU S; HIRAOKA H; KONISHI K; TAKIMOTO Y
PATENT ASSIGNEE: (NIPA-C) NIPPON PAINT CO LTD
COUNTRY COUNT: 19

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9728007	A1	19970807	(199737)*	JA	33[0]	
JP 09527498	X	19990223	(199918)	JA		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9728007 A1		WO 1997-JP268	19970204
JP 09527498 X		JP 1997-527498	19970204
JP 09527498 X		WO 1997-JP268	19970204

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 09527498 X		Based on	WO 9728007 A

PRIORITY APPLN. INFO: JP 1996-18666 19960205
AN 1997-402432 [37] WPIX
AB WO 1997028007 A1 UPAB: 20050518
A lithographic plate material for laser direct make-up that comprises a recording layer is obtainable by pulsed-laser irradiation, which includes a thermoplastic polymer matrix with an absorption band in the UV region and particulates dispersed in it.
Also claimed is an offset printing method using the above lithographic plate material, including the steps of (a) manufacturing the plate material; (b) hydrophilicising the irradiated parts of the material by irradiating the surface of the recording layer with a pulsed laser to give the corresponding image; and (c) printing by application of ink for lithographic printing onto the surface of the recording layer and then printing.
USE - The lithographic plate material is for use in the printing industry.
ADVANTAGE - The recording layer of the lithographic plate material has superior print recovery properties, and such plate material provides good water retentivity in parts of the recording layer surface irradiated by laser, with hardly any scumming, thereby leading to lower printing costs and a cleaner print environment.

Member(0002)
ABEQ JP 09527498 X UPAB 20050518
A lithographic plate material for laser direct make-up that comprises a recording layer is obtainable by pulsed-laser irradiation, which includes a thermoplastic polymer matrix with an absorption band in the UV region and particulates dispersed in it.
Also claimed is an offset printing method using the above lithographic plate material, including the steps of (a) manufacturing the plate material; (b) hydrophilicising the irradiated parts of the material by irradiating the surface of the recording layer with a pulsed laser to give the corresponding image; and (c) printing by application of ink for lithographic printing onto the surface of the recording layer and then printing.
USE - The lithographic plate material is for use in the printing industry.
ADVANTAGE - The recording layer of the lithographic plate material has superior print recovery properties, and such plate material provides good water retentivity in parts of the recording layer surface irradiated by laser, with hardly any scumming, thereby leading to lower printing costs and a cleaner print environment.

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(FILE 'HOME' ENTERED AT 09:51:41 ON 26 MAR 2008)

FILE 'REGISTRY' ENTERED AT 09:51:56 ON 26 MAR 2008
L1 STR
L2 0 SEA SSS SAM L1
L3 32 SEA SSS FUL L1

FILE 'CAPLUS' ENTERED AT 09:54:21 ON 26 MAR 2008
L4 4 SEA ABB=ON PLU=ON L3

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                DIS

     FILE 'REGISTRY' ENTERED AT 09:54:36 ON 26 MAR 2008
L5              STR L1

     FILE 'WPIX' ENTERED AT 09:55:03 ON 26 MAR 2008
L6              0 SEA SSS SAM L5
L7              9 SEA SSS FUL L5
L8              3 SEA ABB=ON  PLU=ON  L7/DCR

     FILE 'MARPAT' ENTERED AT 09:55:36 ON 26 MAR 2008
L9              6 SEA SSS SAM L5
L10               STR L5

     FILE 'MARPAT' ENTERED AT 10:04:14 ON 26 MAR 2008
L11             3 SEA SSS SAM L10
L12               STR L10
L13             1 SEA SSS SAM L12
                  D SCA
L14            15 SEA SSS FUL L12

     FILE 'BEILSTEIN' ENTERED AT 10:07:42 ON 26 MAR 2008
L15             0 SEA SSS SAM L12
L16             0 SEA SSS FUL L12

     FILE 'CAPLUS, DISSABS, CONFSCI, WPIX' ENTERED AT 10:08:15 ON 26 MAR 2008
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L17           945 SEA ABB=ON  PLU=ON  ("KOIKE A"/AU OR "KOIKE A A G C L"/AU OR
                  "KOIKE A D C"/AU OR "KOIKE A M M"/AU OR "KOIKE A S C E I"/AU
                  OR "KOIKE A U"/AU OR "KOIKE AKIO"/AU)
                  E IWAHASHI Y/AU
L18           151 SEA ABB=ON  PLU=ON  ("IWAHASHI Y"/AU OR "IWAHASHI Y A G C
                  L"/AU OR "IWAHASHI YASUTOMI"/AU)
                  E TAKIMOTO Y/AU
L19           398 SEA ABB=ON  PLU=ON  ("TAKIMOTO Y"/AU OR "TAKIMOTO Y S C"/AU OR
                  "TAKIMOTO YASUYIKI"/AU OR "TAKIMOTO YASUYUKI"/AU OR "TAKIMOTO
                  YASUYUKU"/AU)
                  E KIKUGAWA S/AU
L20           134 SEA ABB=ON  PLU=ON  ("KIKUGAWA S"/AU OR "KIKUGAWA S A G C
                  L"/AU OR "KIKUGAWA S M M"/AU OR "KIKUGAWA SHINNYA"/AU OR
                  "KIKUGAWA SHINYA"/AU)
L21          1603 SEA ABB=ON  PLU=ON  (L17 OR L18 OR L19 OR L20)
L*** DEL2708134 S L21 OR (SI OR SILIC?)
L22           201 SEA ABB=ON  PLU=ON  L21 AND (SI OR SILIC?)
L23            39 SEA ABB=ON  PLU=ON  L22 AND (TI OR TITAN? OR TIO2)

     FILE 'CAPLUS' ENTERED AT 10:12:11 ON 26 MAR 2008
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     FILE 'WPIX' ENTERED AT 10:12:20 ON 26 MAR 2008
                  D QUE L8

     FILE 'MARPAT' ENTERED AT 10:12:27 ON 26 MAR 2008
                  D QUE L14

     FILE 'BEILSTEIN' ENTERED AT 10:12:34 ON 26 MAR 2008
                  D QUE L16

     FILE 'CAPLUS, WPIX, MARPAT' ENTERED AT 10:12:41 ON 26 MAR 2008
L24            19 DUP REM L4 L8 L14 (3 DUPLICATES REMOVED)
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                    ANSWER '5' FROM FILE WPIX
                    ANSWERS '6-19' FROM FILE MARPAT
               D L24 IBIB ABS HITSTR 1-5
               D L24 IBIB ABS QHIT 6-19

     FILE 'CAPLUS, DISSABS, CONFSCI, WPIX' ENTERED AT 10:14:16 ON 26 MAR 2008
               D QUE L23
L25          24 DUP REM L23 (15 DUPLICATES REMOVED)
                    ANSWERS '1-19' FROM FILE CAPLUS
                    ANSWERS '20-24' FROM FILE WPIX
               D L25 IBIB ABS TOT
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